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The present invention describes a novel enzymatic nucleic acid (ENA) having a harmmerhead mocification at position 4 of the ENA; (iii) at 2. (2-allyl modification at position 4 of the ENA; (iii) at least ten 2. 0-methyl modification at position 4 of the ENA; (iii) at least can inhibit collagenase and stromelysin production in the symovial ENA's membrane of joints for the treatment or prevention of arthritis, particularly osteoarthritis or rheumatoid arthritis. The ENA's can also be used to treat antigen presenting cells of a donor to induce tolerance in a recipient to an alloantion of a donor. They can also he used for enhancing graft tolerance or for treating autoimmune disease, and for reating allergies and other inflammercry conditions. The ENA's can also be used in diagnosis. Riboxyme therapy impacts on the expression of stromelysin without introducing the non-specific effects upon gene
                                                                                                                                                                                                                                                                                             Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; halfpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enzymatic nucleic acid molecules having a hammer-head motif - used for the treatment of arthritis, induction of graft tolerance or treatment of auto-immune diseases.
                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    I, Draper K, Pavco P;
Wincott F, Matulic-Adamic J;
Burgin A;
                                  .
    Length 15;
   Score 11.8; DB 1; Length 1
Pred. No. 5.1e+02;
; Mismatches 2; Indels
                                                                                                                                                                                                                                                               Human CD40 hammerhead ribozyme target SEQ ID NO:3219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Usman N,
Modak A,
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94US-00363253.
94US-00363254.
95US-00426124.
95US-00434509.
95US-000951P.
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   ch 0.5%;
l Similarity 66.7%;
10; Conservative
                                                               TGTGCCTACCCCAGA 850
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                                                                                           ugueccuacceaaa 15
                                                                                                                                                                       AAX66587 standard; RNA; 15
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Thompson JD,
                                                                                                                                                                                                                                  (first entry)
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Query Match
Best Local Similarity
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Mcswiggen J,
Karpeisky A,
                                                                                                                                                                                                                                                                                                                                                             diagnosis; ss
                                                                                                                                                                                                                                  20-JUL-1999
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17-FEB-1995;
20-APR-1995;
02-MAY-1995;
04-MAY-1995;
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23-DEC-1994;
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                                                               836
                                                                                                                                                                                                    AAX66587;
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                                                                                                                                         RESULT 832
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                               Matches
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control of various are allelic polymorphic markers found in the human genome (represented in AXX10269-X12937). These primers can be used in a genome (represented in AXX10269-X12937). These primers can be used in a method for determining polymorphic forms in an individual for use in e.g. forensics, paternity testing or for phenotypic typing for diseases such as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, Wiskott-Addrich syndrome, Fabry's disease, familial hypercholesterolemia, polycystic kidney disease, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary syndrome, osteogenesis imperfecta, acute intermittent porphyria, autoimmune diseases, inflammation, cancer, diseases of the nervous syndrome, osteogenesis imperfecta, acute intermittent porphyria, autoimmune diseases, inflammation, cancer, diseases of the nervous syndrome, carefinity, and susceptibility or receptivity to particular drugs or the rapeutic treatments. The isolated polymorphic nucleic acid segments can also be used to produce medicaments for the treatment or prophylaxis of such diseases
                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX09121-X10268 are allele-specific oligonucleotide primers used in the
expression which accompany treatment with retinoids and dexamethasone. The concentration of ilbozyme required to affect a therapeutic treatmers loss lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Polymorphism, biallelic, human; forensic; paternity testing; disease; detection; phenotypic typing; characteristic; infection; hereditary; autoimmune disease; cancer; inflammation; drug; therapy; medicament; treatment; marker; primer; ss.
                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated nucleic acid segments from the human genome - used for determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease.
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                                                                                                                                                         Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human biallelic polymorphic marker downstream primer #549.
                                                                                                                                                                                               Indels
                                                                                                                 Sequence 15 BP; 4 A; 7 C; 1 G; 0 T; 3 U; 0 Other;
                                                                                                                                                       0.5%; Score 11.8; DB 1;
66.7%; Pred. No. 5.1e+02;
                                                                                                                                                                                             3; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 16; Page 218; 310pp; English.
                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hudson T;
                                                                                                                                                                                                                                     743 ACACCGTGTGCACCT 757
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                                                                                                                                                                                                                                                            ACACCAUCUGCACCU 15
                                                                                                                                                                                                                                                                                                                                                                            AAX10243 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                             10; Conservative
                                                                                                                                                     Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-286974/25.
                                                                           present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9820165-A2
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ID AAX1
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Gaps

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Indels

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Mismatches

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Conservative

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Matches

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AAV48709-886 represent antisense oligonuclectides directed against the ErbB-2 gene. Of these, only oligonuclectides AAV48709-91 resulted in significant redcution in ErbB-2 protein expression, while chigh in redcution in ErbB-2 protein expression, while considered the redcution in ErbB-2 protein effect. The oligonuclectides and intelled effect. The oligonuclectides and intelled effect. The oligonuclectides that can each form three hydrogen bonds to cytosine; do not contain four consecutive nuclectides able to form three H-bonds each to four consecutive cytosines; do not contain two sequences of three consecutive consecutive and the ratio between residues able to form two H-bonds each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The cytosines, and the ratio between residues able to form two H-bonds each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The consecutions are used to modulate expression of genes, particularly the genes for p53, ErB-2, junb, junb, TGF-beta 1 or beta 2 to control proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteochasts, osteochasts and/or keratinocytes). The cligonuclectides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases of cancer or (targeting TGF) for stimulating the immune system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive quancisine or incaine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in
                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                 3rbB-2; antisense oligonucleotide; modulate; gene expression; ss.
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                                                          Length 15;
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                                                                                               Indels
                    Sequence 15 BP; 1 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
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                                                      O.5%; Score 11.8; DB 1; Local Similarity 86.7%; Pred. No. 5.1e+02; les 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 11.8; DB 1;
Pred. No. 5.1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                           ErbB-2 gene antisense oligonucleotide ErbB-2-26.
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                                                                                                                                                                                                                                                                        AAV48734 standard; DNA; 15 BP.
                                                                                                                                   1195 GTGGCACCACCTAT 1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Brysch W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
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                                                            Query Match
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               differentially expressed in colorectal cancer, in pancreatic cancer, or differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to isolate unidentified genes from cDNA libraries. The tag sequences can also be used in a method for diagnosing colon or pancreatic cancer in a sample euspected of being neoplastic. The method comparises comparing the level of at least one transcript in a first sample of a tissue to a being neoplastic and the second sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Use of isolated gene transcripts - useful for developing products for the diagnosis, prognosis and treatment of cancers, particularly colon and pancreatic cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                             Tag sequence; colorectal cancer; pancreatic cancer; colon cancer; diagnosis; prognosis; treatment; ss.
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                                                                                                                                                                                                               Tag sequence of a transcript increased in colorectal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 4 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 2; Page 34; 120pp; English.
                                                                                                                                                                                                                                                                diagnosis; prognosis; treatment;
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933 CCTCCTCTTCATTGG 947
                               ccrccrcrrcagage 15
                                                                                                               AAX31190 standard; DNA; 15
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                                                                                                                                                                                                                                                                                                  Homo sapiens
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AC AAV9
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defibriotide; polyanion salt; HIV; protozoan infection; schistosoma; Schistocerca Leishmania; Trypanasoma; fungus infection; Pneumocysties carinii; malaria; viral infection; genetic disease; buchenne's miscular dystrophy; Down's syndrome; degenerative disease; neoplasia; cancer; skin condition; drug resistance; ss.

Human immunodeficiency virus.

Synthetic.

WO9848843-A1

05-NOV-1998

98WO-US008357. 97US-00848013.

28-APR-1998; 28-APR-1997;

region and cellular regulatory factor oligonucleotide.

(first entry)

09-MAR-1999

AAV99282;

HIV homology

BP.

AAV99282 standard; DNA; 15

AAV99282/c RESULT 837

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A method has been developed for the identification of a nucleic acid capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method acid catalysts (NAC) having a substrate binding domain (SBD), comprising a caid catalysts (NAC) having a substrate binding domain (SBD), comprising a random sequence, and a catalytic domain (CD); and (b) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with endoantiess activity and catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to cleave target nucleic acid, particularly for treating systemic diseases caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-happaic ascites and infection. They may also be used to detect genetic drift and mutations in diseased calls and to determine c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate expression of the Raf gene are used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or of sused to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or of sused to treat modification increases stability against muclease and activity. Apv90922 to Apv33877 represent NACs that can be used in the method, specifically for modulating the expression of a Raf gene
                                                                                   Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme; target; substrate; catalyst; modulation; expression; Raf gene; delivery; screening; identification; synthesis; deprotection; purification; cancer; inflammation; psoriasis; non-hepatic ascites; infection; genetic drift; restenosis; rheumatoid arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, restence;s, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.
                                              Target sequence with sequence homology to c-raf and A-raf position 2127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K,
Parry T, Beigelman L, Mcswiggen JA, Karpeisky A,
Thompson J, Workman CT, Beaudry A, Sweedler D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 2 A; 11 C; 0 G; 0 T; 2 U; 0 Other;
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97US-00517U8P.
97US-00517U8P.
97US-0061321P.
97US-0061324P.
97US-0064366P.
                                                                                                                                                                                                                                                                                                                                                      98WO-US009249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RIBO-) RIBOZYME PHARM INC.
18-FEB-1999 (first entry)
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                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                  WO9850530-A2
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02-OCT-1997;
05-NOV-1997;
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Use of defibrotide nucleic acid components - for treating e.g. infectious diseases, genetic diseases, degenerative diseases, DNA damage, neoplasia and skin disease, particularly HIV infection.

WPI; 1999-034643/03.

(BURC/) BURCOGLU A.

Burcoglu A;

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oligonucleotides AAV992B1-83 represent modified defibriotide sequences containing a Human immunodeficiency virus (HIV) homology region and a cellular regulatory factor. Defibriotide is a polyanion salt of a cellular regulatory factor. Defibriotide is a polyanion salt of a deoxyribonucleic acid obtained from mammalian tissue. The products can be used for treating disease such as infection, schistosoma infection, chistocraca Leishmania infection, Trypansoma infection e.g. Candida tropicalis and japonicum, Schistocarca Leishmania infection, Trypansoma infection e.g. Candida Ablacians, Aapsergillus infection, Pneumocystis carinii infection, candida Ablacians, Aapsergillus infection, Pneumocystis carinii infection, cytomegalovirus infection, Hepatitis virus infection, human papilloma control generatic diseases e.g. Duchenne's muscular dystrophy and Down's syndrome; degenerative disease, encephalopathy, dementia, Alzheimer's disease, Parkinson's disease, neuropathy, cardiomyopathy, cardiomyopathy, cardiomyopathy, cardiomyopathy, cardiomyopathy, control in a Sayre syndrome, retinitis pigmentosa, actaxia, selzures, proximal muscle weakness, Leber's retinitis pigmentosa, actaxia, selzures, proximal muscle weakness, Leber's syndrome, pancreatic cancer, neuropathy, optic neuropathy, optic neuropathy, cardiomyopathy, colon cancer; and skin disease, pancreatic cancer, lung cancer, and colon cancer; seborrheic dermatitis, psoriasis, Reiter's syndrome, insect colon cancer; and skin diseases, encated via administering the nucleic addition a drug resistance can be treated via administering the nucleic colon cancer and components of delibrotide and the variants in combination with the
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0.5%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 5.1e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 21; Page 80; 96pp; English
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Gaps

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0.5%; Score 11.8; DB 1; Length 15; 80.0%; Pred. No. 5.1e+02; ive 1; Mismatches 2; Indels

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                                                                                                                                           Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage; cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer; autoimmune disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 encymatic nucleic acid, especially a harmwerhead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence as screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the lungth of the binding arms or by modification to prevent degradation by viral replication, and are used to treat diseases associated with hepaticis C virus (HCV) infection, e.g. cirrhosis, liver failure and hepatoccellular carcinoma. The ribozymes may be used in combination with interferon to treat HCV infection, other infectious diseases, autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.
                                                                                                                      Substrate for HH ribozyme HCV-5930 which cleaves HCV RNA at nt. 5930.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence represents the preferred target sequence of an
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                                                                                                                                                                                                                                                                                                                                                         Blatt L, Mcswiggen JA, Roberts E, Pavco PA, Macejak D;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 1 A; 4 C; 5 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 60; 123pp; English.
                                                       ВЪ.
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98US-0100842P.
99US-00257608.
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                                                      AAZ62704 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                   (RIBO-) RIBOZYME PHARM INC.
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                                                                                               28-MAR-2000 (first entry)
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15 GCTGTTGGCTCTGGT
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                                                                                                                                                                                       Hepatitis C virus
                                                                                                                                                                                                                                                                                        18-SEP-1998;
25-FEB-1999;
23-MAR-1999;
                                                                                                                                                                                                             409955847-A2
                                                                                                                                                                                                                                                        26-APR-1999;
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                                                                           AAZ62704;
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                                 RESULT 838
                                            AAZ62704/c
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The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the cleavage sites were identification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatotisis C virus (HCV) infection, e.g. cirrhosis, liver failure and hepatotellular carcinoma. The ribozymes may be used in combination with interferon to treat HCV infection, other infectious diseases, autoimmune diseases, and cancer
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cancer;
                                                                                                                              Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
autoimmune disease; ss.
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                                                                    Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 5036.
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cirrhosis; liver failure; hepatocellular carcinoma; interferon;
autoimmune disease; ss.
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98US-0100842P.
99US-00257608.
99US-00274553.
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AAZ62498 standard; RNA; 15
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(first entry)
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25-FEB-1999;
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28-MAR-2000
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Macejak

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The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mANA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the carget these sites and their activities optimised by either varying the carget the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatitis C virus (HCV) infection, e.g. cirrhosts, liver failure and hepatocellular carcinoma. The ribozymes may be used in combination with interferon to treat HCV infection, other infectious diseases, autoimmune
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                                                                                                                                                                   Blatt L, Mcswiggen JA, Roberts E, Pavco PA,
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                                                                                                                                                                                                                                                                                                                 Claim 1; Page 78; 123pp; English.
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                                    98US-0100842P.
99US-00257608.
99US-00274553.
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98JP-00297409
                    98US-0083217P
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                                                                                                                            (RIBO-) RIBOZYME PHARM INC
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nes 13; Conservative
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                                           18-SEP~1998;
25-FEB-1999;
23-MAR-1999;
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                      27-APR-1998;
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                                                                                                                                                                                                                                                                                                                                          Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 53; 123pp; English.
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98US-0100842P.
99US-00257608.
99US-00274553.
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                                                                                                                                                                                                                                                                                                                                          Mcswiggen JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                hepatitis C infection.
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                      Hepatitis C virus
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18-SEP-1998;
25-FEB-1999;
23-MAR-1999;
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The invention relates to the isolation of sequences encoding human haemopoietin receptor protein family NR8 genes. The NR8 family sequences were initially searched for comparison on a nucleic acid database with the nucleic acid probe sequence TGRAGYNNNTGGAGY encoding the amino acid sequence TGPAGYNNTWGGAGY encoding the amino acid sequence Trp-Ser-Xaa-Trp-Ser. The sequences AAZ59258-Z59300 and AAZ90816-280925 represent specific examples of probe sequences used in the search. Antibodies to the NR8 family proteins are used for the diagnosis of blood formation disorders. Compounds identified as binding to the proteins are
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0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; ive 0; Mismatches 2; Indels
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98JP-00297409.
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ID AAZS9278 standard; DNA, 15
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                                                Conservative
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13; Conserv
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19-OCT-1998;
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  Query Match
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                                                                                                         The invention relates to the isolation of sequences encoding human haemopoietin receptor protein family NR8 genes. The NR8 family sequences were initially searched for comparison on a nucleic acid database with the nucleic acid probe sequence TGGAGYNNNTGAGY encoding the amino acid sequence Trp-Ser-Xaa-Trp-Ser. The sequences AAZ59258-Z59300 and AAZ90816-Z99925 represent specific examples of probe sequences used in the search. Antibodies to the NR8 family proteins are used for the diagnosis of blood formation disorders. Compounds identified as binding to the proteins are used for the treatment of such disorders
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  Hemopoietin receptor protein family NR8 used for diagnosis of blood formation disorders.
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                                                                      Example 1; Page 43; 176pp; Japanese
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WO9967290-A1

23-JUN-1999; 24~JUN-1998; 19-OCT-1998;

29-DEC-1999

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The invention relates to the isolation of sequences encoding human haemopoietin receptor protein family NR8 genes. The NR8 family sequences were initially searched for comparison on a nucleic acid database with the nucleic acid probe sequence TGGAGATNINTGGAGY encoding the amino acid sequence Trp-Ser-Xaa-Trp-Ser. The sequences AAZ59258-Z59300 and AAZ90816-Z59325 represent specific examples of probe sequences used in the search. Antibodies to the NR8 family proteins are used for the diagnosis of blood formation disorders. Compounds identified as binding to the proteins are used for the treatment of such disorders
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                                                                                                                         Hemopoietin receptor protein family NR8 used for diagnosis of blood
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blood formation disorder; fusion protein; probe; ss.
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86.7%; Pred. No. 5.1e+02;
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(CHUS ) CHUGAI RES INST MOLECULAR MEDICINE INC.
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98JP-00297409
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                                                               Haemopoietin receptor family; NR8; antibody; diagnosis;
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                                                                                   blood formation disorder; fusion protein; probe; ss
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                        Human NR8 gene probe
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Query Match

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24-JUN-1998; 19-OCT-1998;

23-JUN-1999;

29-DEC-1999

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Best Loca Matches

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Neocarzinostatin apoprotein synthetic gene useful as a chemotherapy agent for acute leukemia, bladder cancer and pancreatic cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes a novel neocarzinostatin (NCS) apoprotein synthetic gene (I), apoNCS. The products of the invention can be used as a chemchbrapy agent for acute leukemia, bladder cancer and pancreatic cancer. This sequence encodes a fragment of the apoNCS protein described in the method of the invention
                                                                                                                                 Neocarzinostatin; NCS; apoprotein; apoNCS; chemotherapy; acute leukemia; bladder cancer; pancreatic cancer ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C-1027 biosynthesis gene cluster; apoprotein; chromophore;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2; Indels
                                                                                                      Neocarzinostatin apoprotein DNA fragment SEQ ID NO: 17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C-1027 gene cluster reverse PCR primer for ORF -6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence 15 BP; 4 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 11.8; DB 1;
Pred. No. 5.1e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 11; 12pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
AAA71517 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-JAN-1999; 99US-0115434P. 05-JAN-2000; 2000US-00477962.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JAN-2000; 2000WO-US000446.
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                                                                                                                                                                                                                                                                                                         98JP-00358029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                754 ACCTGCCATGCAGGT 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAA63356 standard; DNA; 15
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                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Streptomyces globisporus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matche's 13; Conserval
                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-501188/45
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                                                                                                                                                                                                                                  JP2000175687-A.
                                                                                                                                                                                                                                                                                                           16-DEC-1998;
                                                                                                                                                                                                                                                                                                                                              16-DEC-1998;
                                                                       11-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-MAR-2001
                                                                                                                                                                                                                                                                      27-JUN-2000.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primer;
                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to the isolation of sequences encoding human haemopoietin receptor protein family NR8 genes. The NR8 family sequences were initially searched for comparison on a nucleic acid database with the nucleic acid probe sequence TGGAGYNNATGGAGY encoding the amino acid sequence Trp-Ser-Xaa-Trp-Ser. The sequences AAZ59258-Z59300 and AAZ90816-Z90925 represent specific examples of probe sequences used in the search. Antibodies to the NR8 family proteins are used for the diagnosis of blood formation disorders. Compounds identified as binding to the proteins are used for the treatment of such disorders
Antibodies to the NR8 family proteins are used for the diagnosis of blood formation disorders. Compounds identified as binding to the proteins are used for the treatment of such disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                              Gaps
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                                                                                                      0.5%; Score 11.8; DB 1; Length 15;
86.7%; Pred. No. 5.1e+02;
Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Haemopoietin receptor family, NR8; antibody, diagnosis, blood formation disorder; fusion protein; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 3 A; 1 C; 7 G; 4 T; 0 U; 0 Other;
                                                                     Sequence 15 BP; 3 A; 1 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hemopoletin receptor protein family NR8 used for formation disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CHUS ) CHUGAI RES INST MOLECULAR MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 44; 176pp; Japanese
                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                               821 TGGAGTGCACGAAGT 835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-JP003351
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98JP-00297409
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                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                     Human NR8 gene probe #123
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                                                                                                                       Local Similarity 86.7
Les 13; Conservative
                                                                                                                                                                                                                                                                                                         AAZ90895 standard; DNA;
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WPI; 2000-116933/10. Nomura H, Maeda M;

24-JUN-1998; 19-OCT-1998;

23-JUN-1999;

Homo sapiens

WO9967290-A1

29~DEC-1999

24-MAY-2000

AAZ90895;

RESULT 848

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AAZ9089

Local Similarity

Query Match

13;

Matches

RESULT 849 AAA71517/c

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Gaps

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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense therapy, antiproliferative; antinflammatory, antipsoriatic; cytostatic; dermatological, cardiant; virucide, ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pityriasis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neoplasia; scaleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia, kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBF]-2 or IGFBF], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-61501). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the skin, a brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
  useful for diagnosis of HMG-COA reductase mediated diseases such as dyslipidemia and other cardiovascular diseases such as myocardial infarction and stroke. HMG-COA reductase antagonist drugs are used to treat dyslipidemia and other cardiovascular diseases such as myocardial infarction and stroke
                                                                                                                                                                                                  0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                     Sequence 15 BP; 3 A; 1 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Edmondson SR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 8; Page 84; 201pp; English.
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                                                                                                                                                                                                                                                                                                       1131 CTTCACCTCCAGCTC 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-JUN-2000; 2000WO-AU000693.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IGF-I oligonucleotide #3595.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF52635 standard; DNA; 15
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Best Local Similarity 86.77
Matches 13, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                inflammation.
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                                                                                                                                                                                                                                               The present invention is concerned with the elucidation of the gene cluster from Streptomyces globisporus which regulates enediyne C-1027 synthesis. Enediyne C-1027 is an antibiotic, consisting of an apoprotein and a non-peptidic chromophore, which causes damage to DNA. The primers AAA63353-A63451 were used to isolate the open reading frames which used to produce the protein and to identify antagonists, both of which can be used in the treatment of cancer
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                                                                                               Isolated nucleic acid comprising a nucleic acid encoding any of C-1027 open reading frames (ORFs) -7 to 42, excluding ORF 9 (cagA), useful for the production of enediyne C-1027 antitumor antibiotics.
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HMG-COA reductase gene; genetic marker; cardiovascular disease;
myocardial infarction; stroke; PCR primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 2 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.5%; Score 11.8; DB 1;
86.7%; Pred. No. 5.1e+02;
ative 0; Mismatches 2;
  Standage
                                                                                                                                                                                                     Disclosure; Page 16; 160pp; English
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  Christenson SD,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1002 GAAATCGACACCTGA 1016
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 86,7%
Matches 13, Conservative
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                                                  WPI; 2000-465947/40.
  Liu W,
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Shen
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schultz451-1.rng

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. Match 0.5%; Score 11.8; DB 1; Length 15; Local Similarity 86.7%; Pred. No. 5.1e+02; les 13; Conservative 0; Mismatches 2; Indels
                                U; 0 Other;
                                Sequence 15 BP; 4 A; 3 C; 5 G; 3 T; 0
or any other hyperplasia
                                                                                                                               1219 GACCCCATCCTTGCG 1233
                                                                                                                                                               15 GACTCCATCCTTGAG 1
                                                                Query Match
vessels
                                                                                             Matches
SXS
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Gaps .. 0

RESULT 853

AAF50568 standard; DNA; 15 BP

AAF50568

AAF50568;

30-MAR-2001 (first entry)

:GF-I oligonucleotide #1528

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis, IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis, pilaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis; neophasia; scleroderma, wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplama, kidney disease; neobascular condition; hyperplama; ss.

Homo sapiens

WO200078341-A1

21-JUN-2000; 2000WO-AU000693

99US-0140345P. 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Wraight CJ, Werther GA,

WPI; 2001-041421/05

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 70; 201pp; English

The present invention relates to a method for ameliorating the effects of antisense oligonucleotide, (for Insulin-like Growth Factor [IGF] receptor, IGF binding protein [IGFBP] - 2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45153-155161). The method is useful for ameliorating the effects of psoriasis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperiovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood ressels or any other hyperplasia

0 Other; Sequence 15 BP; 3 A; 9 C; 0 G; 3 T; 0 U;

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                                                                                                                                                                                           Antisense therapy, antiproliferative, antiinflammatory; antipsoriatic, cytostatic, dermatological; cardiant, virucide, ophthalmological; keloid, skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keardosis; neoplasia; scaleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasis; kidney disease; neovascular condition; hyperplasis; kidney disease;
                     Gaps
                     ò
 Length 15;
0.5%; Score 11.8; DB 1;
86.7%; Pred. No. 5.1e+02;
ative 0; Mismatches 2;
                                                                                                               BP.
                                         1132 TTCACCTCCAGCTCC 1146
                                                           Treactreaced 15
                                                                                                                                                                           IGF-I oligonucleotide #4931
                                                                                                               AAF53971 standard; DNA; 15
                                                                                                                                                      (first entry)
 Query Match 0.5
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                      30-MAR-2001
                                                                                                                                   AAF53971;
                                                                                           RESULT 854
                                                                                                      AAF53971,
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(MURD-) MURDOCH CHILDRENS RES INST. 21-JUN-2000; 2000WO-AU000693. 21-JUN-1999;

WO200078341-A1. Homo sapiens.

28-DEC-2000.

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 93; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an anticorders. The method comprises contacting the skin, with an anticorderide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, clingonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-0190nucleotides of the present invention (see AAF45151 and AAF45153-0190nucleotides provided in the second in the vessels or any other hyperplasia

Sequence 15 BP; 4 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Gaps .. 0 0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; ive 0; Mismatches 2; Indels Conservative Query Match Best Local Similarity Matches 13; Conserv

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AAF46517 standard;

RESULT 856 AAF46517 IGFBP2 oligonucleotide #1356.

(first entry)

30-MAR-2001

AAF46517;

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The present invention relates to a method for ameliorating the effects of akin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBB), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a prain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                            Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, kaloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis; neophasia; scleroderma, wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplama; kidney disease; neobarchoof the retina; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wraight CJ, Werther GA, Edmondson SR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     vessels or any other hyperplasia
                                                                                                                                               AAF49377 standard; DNA; 15 BP
  GIGCCCAGITCCACC 1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99US-0140345P.
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                                                                                                                                                                                                                                                                          IGF-I oligonucleotide #337
                                                                                                                                                                                                                                30-MAR-2001 (first entry)
                        15 GTGTCCAGTTCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-041421/05
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
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                                                                                                              Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding proctein, IGFB-2; IGFBP3; inflammation, psoriasis; pilaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis; neophasia; scleroderma; wart, skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia, kidney disease; neobascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 1 A; 0 C; 11 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wraight CJ, Werther GA, Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MURD-) MURDOCH CHILDRENS RES INST.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disease, kidney disease, hyperpro
vessels or any other hyperplasia
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ID AAF46761 standard; DNA; 15
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Best Local Similarity 86.7
Matches 13, Conservative
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Gaps ·,

1249 GACCCCATCCCCAAC 1263

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Local Similarity

Matches

1 GACCICITCCCCAAC 15

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleoride, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, or inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the artisense oligonucleotide which can be used to design the affects of psoriasis, chipyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, chrowing disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                               Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1, pityriasis; IGF binding procein, IGFBP-2, IGFBP3, inflammation, psoriasis, pilaris, growth factor mediated cell proliferation; ichthyosis, serborinoea, ruba, kearcosis, neoplasia, scleroderma, wart, skin cancer, sclerotic disease, hyperneovascular condition, hyperplasia, kidney disease, neovascular condition, hyperplasia, kidney disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Edmondson SR;
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                                                                                              IGFBP3 oligonucleotide #181.
                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-041421/05
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                                                          30-MAR-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inflammation
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                 AAF46761;
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Gaps ö 0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; tive 0; Mismatches 2; Indels Sequence 15 BP; 0 A; 5 C; 9 G; 1 T; 0 U; 0 Other; Local Similarity Query Match

1231 GCGACAGCCTTCGC 1245 gegeckáckékeke 1 13 à g

AAF49378 standard; DNA; 15 AAF49378; RESULT 858 AAF49378
ID AAF4
XX
AC AAF4
XX
DT 30-M

(first entry)

30-MAR-2001

IGF-I oligonucleotide #338.

Antisense therapy; antiproliferative; antinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; georiasis; pityriasis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neobascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

(MURD-) MURDOCH CHILDRENS RES INST. 99US-0140345P. 21-JUN-1999;

Edmondson SR; Werther GA, Wra'ight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 63; 201pp; English.

The present invention relates to a method for ameliorating the effects of akin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF] receptor, IGF binding protein [IGFBP] or IGFBP3), which is capable inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45151 orbithyosis, pityriaeis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood disease, kidney disease, vessels or any other hyperplasia

Sequence 15 BP; 3 A; 9 C; 0 G; 3 T; 0 U; 0 Other;

Gaps ö 0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; tive 0; Mismatches 2; Indels 13; Conservative Best Local Similarity Query Match Matches

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1250 ACCCCATCCCCAACC 1264 1 Accrerrececane

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AAF50793 standard; DNA; 15 AAF50793; **AAF**50793/ **XXXXXXXXX**

RESULT 859

BP

30-MAR-2001

IGF-I oligonucleotide #1753.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [GP]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, of inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectide which can be used to design the antisense oligonuclectide which can be used to design the antisense oligonuclectide is useful for ameliorating the effects of psoriasis, rethingosis, pityriasis, tuba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperprise of the same an neovascular condition of the retina, brain or skin, growth factor-mediated malignancies other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriaais; IGF binding protein; IGFB-2; IGFBB3; inflammation; psoriaais; pilaris; growth factor mediated cell poliferation; ichthyosis; serborrheea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis; kidney disease; neovascular condition; hyperplasis; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Edmondson SR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inflammation.
                                                                                                                                                                                            Homo sapiens.
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0
                            0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; tive 0; Mismatches 2; Indels
Sequence 15 BP; 2 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                Similarity 86.7
13; Conservative
                                 Query Match
                                                   Local
                                                                   Matches
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CCTGGGCTTCAGTCC 1115 ccaggerreagee 1101 15 ò 요

AAF46786 standard; DNA; 15 AAF46786; RESULT 860 **AAF46786**

BP

IGFBP3 oligonucleotide #206. (first entry) 30-MAR-2001

Antisense therapy, antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF biding protein; IGFBP-2; IGFBPB3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [163]-1 receptor, [167 binding protein [16FBP]-2 or IGFBP3), which is capable of inhibiting or reducing prowth factor mediated cell proliferation.

In compared to the disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-154161). The method is useful for ameliorating the effects of psoriasis, cichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, nepplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood custometric processes or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                  Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 0 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                          21-JUN-2000; 2000WO-AU000693.
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                                                                                                                                     WO200078341-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inflammation.
                                                                                                                                                                                                                                                                   21-JUN-1999;
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                                                                                              Homo sapiens
                                                                                                                                                                                28-DEC-2000
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Gaps ö 0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; ive 0; Mismatches 2; Indels Local Similarity 86.7 hes 13; Conservative Query Match Best Loca Matches

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AAF50569 standard; DNA; 15 BP (first entry) 30-MAR-2001 AAF50569; RESULT 861

IGF-I oligonuclectide #1529

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic; cytostatic, dermatological; cardiant; virucide, ophthalmological; Keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; plaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; sclaroderma; wart; skin cancer; sclerotic disease; hyperacovascular condition; hyperplasia; kidney disease; neobascular condition; byterplasia; kidney disease;

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [GGP]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the artisense oligonucleotide which can be used to design the artisense oligonucleotide is useful for ameliorating the effects of psoriasis, chthyosis, pityriasis, ruba, pilaris, serbornhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, disease, kidhey disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                    Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                           Edmondson SR;
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                                                                                                                                                                                                    (MURD-) MURDOCH CHILDRENS RES INST.
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                                                                                                                                                                                                                                           Werther GA,
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                                        WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                       inflammation.
    Homo sapiens
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                                                                               28-DEC-2000
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0; Gaps 0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; ative 0; Mismatches 2; Indels Sequence 15 BP, 4 A, 9 C, 0 G, 2 T, 0 U, 0 Other, 13; Conservative Similarity Query Match Best Local Matches

1133 TCACCTCCAGCTCCA 1147

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AAF50570 standard; DNA; 15 BP (first entry) 30-MAR-2001 AAF50570; RESULT 862 AAF50570

IGF-I oligonucleotide #1530.

growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss. Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; kelorid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

WO200078341-A1

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomorelectide, (for Insulin-like Growth Factor [IGF].

receptor, IGP binding protein [IGFBP]-2 or IGFBP3, which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomuclectide which can be used to design the antisense oligomuclectides of the present invention (see AAF45151 and AAF45153). F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovacular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic mineral of the inside of blood
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 4 A; 10 C; 0 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                            Example 8; Page 70; 201pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         vessels or any other hyperplasia
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                                                                                                                                                                                                                                                                                                                                   inflammation.
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Edmondson SR;

Wraight CJ, Werther GA,

CHILDRENS RES INST.

(MURD-) MURDOCH

99US-0140345P.

21-JUN-1999;

21-JUN-2000; 2000WO-AU000693

28-DEC-2000

1134 CACCTCCAGCTCCAC 1148 1 cacciccaccaccac 15 셤 ò

IGFBP3 oligonucleotide #205. AAF46785 ID AAF46785 standard; DNA; 15 30-MAR-2001 (first entry) AAF46785;

RESULT 863

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic; cytostatic, dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neoplasis; sclaroderma; wart; skin cancer; sclerotic disease; hyperacovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693

Edmondson SR;

GA,

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Sequence 15 BP; 0 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MURD-) MURDOCH CHILDRENS RES INST
           (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                Example 7; Page 45; 201pp; English
                                                                                                                                                                                   or any other hyperplasia
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99US-0140345P.
                                                                                                                                                                                                                                                                                                                    IGFBP3 oligonucleotide #926.
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                                                                                                                                                                                                                                                                               AAF47506 standard; DNA; 15
                                                                                                                                                                                                                                                                                                       (first entry)
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                        Werther
                                    WPI; 2001-041421/05.
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                                                                    inflammation.
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21-JUN-1999;
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                        Wraight CJ,
                                                                                                                                                                                                                                                                                           AAF47506;
                                                                                                                                                                                                           Query Match
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an ancisence oilgonucleotide, (for Insulin-like Growth Factor [IGF] areceptor, ICF binding procein [IGFBP] 2 or IGFBPB), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45153 inthipyosis, pityriasis, ruba, pilaris, serborthoea, keloids, keratosis, incoplasias, scleroderma, warts, benign growths, cancers of the skin, a hypericons of see as a necvascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kinney disease, hyperproliferation of the inside of blood
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                                                                                                 Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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Edmondson SR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vessels or any other hyperplasia
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Wraight CJ, Werther GA,
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                                                     WPI; 2001-041421/05
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                                                                                                                                                                                             inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin discorder, Insulin-like Growth Factor I receptor, IGF-1, pityriasis, IGF binding protein, IGFBP-2, IGFBP3, inflammation, psoriasis, pilaris, growth factor mediated cell proliferation, ichthyosis, serborinoea; ruba, keatosis, neoplasia, scleroderma, wart, skin cancer; sclerotic disease, hypermeovascular condition, hyperplasia, kidney disease, neovascular condition, hyperplasia, kidney disease;
                                                                                                                                                                                                                     Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                       skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factors [IGFF]-1 inhibiting or reducing protein [IGFF]-2 or IGFF], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AMF45151 and AAF45153-F55161). The method is useful for ameliotrating the effects of postaais, inchthyosis, pityriasis, ruba, pitaris, serborthoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a pyperneovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to a method for ameliorating the effects of
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                         inflammation.
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Example 7; Page 50; 201pp; English

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]) receptor, IGF binding protein [IGFBB] - 2 or IGFBB), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45153 - F45161). The method is useful for ameliorating the effects of psoriasis, inchipyosis, pityriasis, ruba, pliaris, serborrhoea, Keloids, Keratosis, hepplaaias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Seguence 15 BP; 5 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

ö Gaps . 0 0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; cive 0; Mismatches 2; Indels Conservative Best Local Similarity Matches 13, Conserva Query Match

1085 CAGGCTTCACCCCCA 1099 CAGGCTACACCACCA 15 g ò

AAF46757 standard; DNA; 15 RESULT 866 AAF4675

ВР

30-MAR-2001 (first entry) AAF46757;

GFBP3 oligonucleotide #177

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin discorder, Insulin-like Growth Factor I receptor; IGP-1; pityriasis; IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea, ruba, keratosis; neophasia; scleroderma; wart, skin cancer; sclerotic disease; hypermeovascular condition, hyperplasia; kidney disease; neobascular condition of the retna; ss.

Homo sapiens

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693

(MURD-) MURDOCH CHILDRENS RES'INST. 99US-0140345P 21-JUN-1999;

Edmondson SR; Werther GA, S, Wraight

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

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As in the method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Pactor [167]-1 receptor, 16F binding protein [167]-1, antisense oligonucleotide, (for Insulin-like Growth Pactor [167]-1 inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide winch can be used to design the antisense Antisense oligonucleotide winch can be used to design the antisense. P45161). The method is useful for ameliorating the effects of psoriasis, pitryriasis, pitryriasis, rubs, plianis, serborrhoea, kelolis, keratosis, neoplasis, soleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperplasia
                                                                The present invention relates to a method for ameliorating the effects of
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                     Example 7; Page 45; 201pp; English.
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IGF-I oligonucleotide #3138. (first entry) AAF52178 standard; DNA; 30-MAR-2001 AAF52178; RESULT 867 AAF52178/

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; oytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperaneovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999;

(MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR, Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 81; 201pp; English.

ö The present invention relates to a method for ameliorating the effects Sequence 15 BP; 5 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

X S

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skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-IRe Growth Factors [1989-1] receptor, IGF binding protein [IGFBP2] or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide of the present invention (see AAP45151 and AAP45153-15751.) The method is useful for ameliotrating the effects of psortasis, inchipyosis, pityriasis, ruba, planis, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
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0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; rative 0; Mismatches 2; Indels
                                                             940 TICATIGGTITAAIG 954
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                                  13; Conservative
                   Best Local Similarity
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   Query Match
                                 Matches
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Gaps ő

> AAH28559 standard; DNA; 15 BP. RESULT 868 AAH2855

AAH28559;

17-JUL-2001 (first entry)

Human interleukin-13 allele specific oligonucleotide #45.

Human; interleukin-13; IL13; single nucleotide polymorphism; SNP; cancer; inflammation; immune disorder; cytokine; asthma; chromosome 5q31; fibrosis; forensic; disease susceptibility; drug screening; probe; ss.

Homo sapiens

WO200123410-A2.

05-APR-2001.

27-SEP-2000; 2000WO-US026556.

28-SEP-1999;

(GENA-) GENAISSANCE PHARM INC.

Stephens JC; Nandabalan K, Denton RR, Chew A,

WPI; 2001-343160/36.

Novel polynuclectide comprising single nucleotide polymorphisms in human interleukin-13 gene is useful for studying expression and function of interleukin-13, as well as diagnosing and treating cancer, inflammatory, and immune disorders.

Claim 15; Page 20; 85pp; English.

The present invention provides the protein, cDNA and genomic sequences of human interleukin-13 [113], and describes the single nucleotide polymorphisms (SNPs) found within the gene, which is found on chromosome 5q31. ILI3 is a pro-inflammatory cytokine thought to be involved in the pathogenesis of asthma and other immune and inflammatory diseases. The ILI3 sequences and the SNPs identified can be used in drug screening, to determine an individual's susceptibility to disease, in forensic and paternity testing, and to identify treatments for cancer, immune and inflammatory diseases, including asthma and diseases characterised by fibrosis. The present sequence is an ILI3 allele-specific oligonucleotide

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                                                                                                                                   n; dopamine receptor D2; DRD2; polymorphism; allele specific; target isogene; detection; single nucleotide polymorphism; SNP; type; schizophrenia; Parkinson's disease; myoclonus dystonia; MD
                  Gaps
                  ..
                                                                                                                       Human DRD2 allele specific oligonucleotide probe SEQ ID NO:45.
    Length 15;
   Score 11.8; DB 1; Length 1
Pred. No. 5.1e+02;
0; Mismatches 2; Indels
0.5%; Scor.
86.7%; Pred
                                                                               BP
                                1294 AAGCCACACAGAGCCTA 1308
                                             1 AAGCCACCAGCCTA 15
                                                                               AAF70302 standard; DNA; 15
                                                                                                           (first entry)
                   13; Conservative
                                                                                                                                                         probe; PCR primer; ss.
     Query Match
Best Local Similarity
                                                                                                                                                                                     WO200105832-A1
                                                                                                          20-APR-2001
                                                                                                                                                                        Homo sapiens.
                                                                                             AAF70302;
                                                                                                                                                    genotype;
                   Matches
                                                                   RESULT 869
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Polynucleotides comprising single nucleotide polymorphisms in the hum dopamine receptor D2, useful for detecting mutations associated with, e.g. schizophrenia, Parkinson's and myoclonus dystonia. WPI; 2001-091967/10.

Stephens JC;

Duda A, Nandabalan K,

(GENA-) GENAISSANCE PHARM INC.

Denton RR,

Chew A,

99US-0144493P.

19-JUL-1999;

19-JUL-2000; 2000WO-US019644.

25-JAN-2001.

Claim 15; Page 22; 135pp; English.

The present invention describes polynuclectides comprising single nuclectide polynucphisms (SNPs) in the human dopamine receptor D2 (DRD2). The polynuclectides may be used in assays to detect and characterise polymorphisms in DRD2 that affect its expression and activity and are involved in disorders such as schizophrenia, Parkinson's and myoclonus dystonia (MD). This information would be useful for studying the biological function of DRD2 as well as in identifying drugs targeting this protein for the treatment of disorders related to its abnormal expression or function. Polymorphisms in the DRD2 gene affect the expression of active and functional polypeptides. Therefore it is advantageous to detect polymorphisms in the DRD2 gene affect the polymorphisms are combined in different copies of the gene. AAF70261 to AAF70308 represent human DRD2 allele specific oligonucleotide probes, and AAF70309 to AAF70404 represent human DRD2 allele specific oligonucleotide primers which are used in the detection of DRD2 polymorphisms. AAF70405 represent oligonucleotide primers for the detection of BRD2 polymorphisms. to AAF70452 represent oligonucleotide primers for the detection of human DRD2 polymorphisms which are given in the exemplification of the present invention. AAF70453 to AAF70538 represent PCR primers for the human DRD2 gene which are used in examples from the present invention

Sequence 15 BP; 4 A; 2 C; 8 G; 1 T; 0 U; 0 Other;

0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; Query Match Best Local Similarity schultz451-1.rng

Matches

AAF69371;

AAF69371,

RESULT

d

Stephens JC;

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receptor-lipha gene (IL4R-alpha, see AAP57718 for the reference sequence). Polymucleotides comprising polymorphic gene variants are useful for therapeutic purposes. For example, where a patient may benefit from expression of a particular IL4Ralpha protein isoform, an expression vector encoding the isoform may be administered to the patient. It may desirable to decrease or block expression of a particular IL4Ralpha isogene, which may be done by turning off by transforming a targeted organ, tissue or cell population with an expression vector that expresses high levels of untranslatable mRNA for the isogene. Specific therapeutics identified by these methods may be useful for allergic diseases. The present sequence is a probe for human IL4R-alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated polynucleotide useful for the identification of therapeutics in allergic diseases is new.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to polymorphisms of the human interleukin 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, neuroprotective, neotropic, gene therapy, vaccine,
Alzheimer's disease, Alzheimer's Disease-Associated Feature, AF;
Alzheimer's Disease-Associated Protein Iseform, API; tryptic digest;
Expression Reference Protein Isoform; ERPI; probe; ss.
                                                      interleukin 4 receptor-alpha; IL4R-alpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 11.8; DB 1; Length 15; Pred. No. 5.1e+02;
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                                                                                                                                                                                                                                                                                                                                            Duda A, Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 15; Page 44; 188pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human API-112 preferred probe #2.
                      Human IL4Ralpha gene probe #141.
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                                                                                                                                                                                                                                                                                                          (GENA-) GENAISSANCE PHARM INC.
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                                                      Polymorphism; human; interle
allergic disease; probe; ss.
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Best Local Similarity
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                                                                                                                 Homo sapiens
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Pred. No. 5.1e+02;
0; Mismatches 2; Indels
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  Indels
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Mismatches
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                                                                                                                                                                                                                                                                                     Human IL4Ralpha gene probe #11
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                                      1196 TGGCACCACCTATC 1210
                                                                                                                                                                    AAF69371 standard; DNA; 15 BP
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13; Conservative
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Windemuth AK;
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AAF69501;

EXXXE

Query Match Best Local 8

Matches

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871

RESULT

AAF6950

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Gaps

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rownsend RR,

Durham KL, Potter DM,

(OXFO-) (PFIZ)

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The present invention relates to a method of coupling visual servoing microscopy with living cell analysis, where cellular image data received from a detection device that monitors cells or subcellular components of the cells, is analysed, and in response to the analysed cellular image data several stimulating devices adapted to stimulate the cells or subcellular components, is automatically actuated. The method is useful concarrying out cell-type specific fluorescence assays that are useful for any types of cells, and allows detection and discrimination between normal, premalignant, malignant and/or multidatus resistant cancer cells obtained from tissue, for establishing a chemotherapeutic regimen that is tailored to an individual patient and/or individual tumour and for screening large numbers of potential drug, insecticide, herbicide and stream expendence is an peptide nucleic acid (PNA) antisense sequence in medicine, agriculture and biotechnology. The present sequence is an peptide nucleic acid (PNA) antisense sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel polynucleotide containing polymorphisms in intercellular adhesion molecule 2 gene, useful in developing drugs for treating human
                                                                                                       Coupling visual servoing microscopy technique with living cell analysis involves analyzing image data received from detection device monitoring cells, and automatically actuating stimulating devices to stimulate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human, intercellular adhesion molecule 2; ICAM2; haplotyping; ss; haplotype pair; single nucleotide polymorphism, genotyping; PCR primer; gene therapy; drug screening; anti-HIV; antiinflammatory; probe; human immunodeficiency virus; sequencing primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nandabalan K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 11.8; DB 1; Length 15; 16.7%; Pred. No. 5.1e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 2 A; 11 C; 1 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human ICAM2 haplotype DNA reference sequence #10.
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                                                                                                                                                                                                                           Example 7; Page 83; 111pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              exemplification of the invention
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                        Parvin B;
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                                                                 WPI; 2002-205819/26
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                        Callahan DE,
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                                                                                                                                                                               cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to methods for the screening, diagnosis and prognosis of Alzheimer's disease. The methods involve the detection of Alzheimer's Disease-Associated Features (AFS) and Alzheimer's Disease-Associated Protein Isoforms (APIS) in cerebrospinal fluid, serum or Bassociated Protein Isoforms (APIS) in cerebrospinal fluid, serum or Expression Reference Protein Isoform (ERPY) in order to determine whether a patient is suffering from, or has a predisposition to, Alzheimer's severity of Alzheimer's bisease. The relative abundance of the AFS and APIS correlates with the severity of Alzheimer's bisease. The present sequence is a probe that may be used for screening an API
                                                                                                                                                                                                                                                                                                               Screening for Alzheimer's disease in a mammal, by making two-dimensional array of a feature whose relative abundance correlates with disease, and comparing with abundance of the feature in samples of healthy persons.
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chemotherapy testing, bcl-2; polyamide backbone, PNA, antisense,
peptide nucleic acid, ss.
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Similarity 86.7%; Pred. No. 5.1e+02;
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Rohlff C, Silber BM, Stiger TR,
White F, Williams SA;
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/note= "polyamide backbone"
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                                                                                                            OXFORD GLYCOSCIENCES UK LTD. PFIZER INC.
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                                                                                                                                                                                                                                                                                                                                                                                                           Claim 83; Page 157; 162pp; English
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03-APR-2001; 2001WO-US010908
                                           03-APR-2000; 2000US-0194504P.
28-NOV-2000; 2000US-0253647P.
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modified_base
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Query Match

Local

Best Loca Matches

domo sapiens

AAL44700;

RESULT 873 AAL44700

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13-DEC-2001

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Gaps

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The invention relates to single nucleotide polymorphisms in the gene encoding human intercellular adhesion molecule 2 (ICAM2). A method for haplotyping the ICAM2 gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the ICAM2 haplotypes given in the specification or whether both copies are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pair. This method is useful in genotypes. An association between a trait and a haplotype or haplotype pair of the haplotype or haplotype pair in a reference population, where a higher haplotype for haplotype pair in a reference population, where a higher haplotype or haplotype pair. IcAM2 and its corresponding DNA are used for studying the expression and function of ICAM2, for use in screening for studying the expression and function of ICAM2, for use in screening for studying the effect of variation on the biological activity of ICAM2. Sequences AAS95562-AAS95417 and AAS954419-AAS95442 represent allele-
specific calgonuclectide probes, sequencing primers and cDNA
immunodeficiency virus infection and inflammatory diseases.
                                                  Example 2; Page 35; 81pp; English.
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Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

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0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; ve 0; Mismatches 2; Indels
                                                          862 AAGGGCACTGAGGAC 876
             86.78;
                                                                                     15 AAGGTCACTGGGGAC 1
                             13; Conservative
               Similarity
   Query Match
                 Local
                             Matches
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HIV-1 reverse transcriptase mutation detection probe SEQ ID NO:473. BP ABZ34231 standard; DNA; 15 (first entry) 31-JAN-2003 ABZ34231; RESULT 875 ABZ34231,

Human immunodeficiency virus; HIV; reverse transcriptase; RT; enzyme; detection; mutation; anti-HIV drug resistance; polymorphism; resistance; probe; ss.

Human immunodeficiency virus 1 Synthetic

NO200255741-A2.

18-JUL-2002.

11-JAN-2001; 2001EP-00870005. 20-APR-2001; 2001EP-00870085. 24-APR-2001; 2001US-0286102P. 09-JAN-2002; 2002WO-EP000153

INNO-) INNOGENETICS NV

Stuyver L;

De Smet K,

WPI; 2002-590680/63.

Detecting detecting

mutations associated with anti-HIV drug resistance comprises at least one of the mutations in the HIV reverse transcriptase

The present invention describes a method for detecting mutations associated with anti-HIV drug resistance in a patient by detecting at least one of the mutations K103N/R, V106A/IL, X181C/I, M184V/I, X188L/I 0190A/S/R, T215Y/F/D/S/A and/or O151M/L in the reverse transcriptase (RT) of HIV strains in a biological sample using a specific set of probes of this of function together in a reverse-hybridisation assay. The method and the nucleic acid sequences used in the method are useful for determining viral mutations and/or polymorphisms in the HIV RT gene associated with resistance. The probes are useful for the genetic detection, preferably in vitro detection of the mutations K103N/R, V106A/IL, Y181C/I, Q151M/L, M184V/I, X188L, G190A/S/R and/or C151SY/FD/S/A in the RT of HIV strains in a biological sample, where the mutation is associated with anti-HIV drug resistance. The method provides a rapid, reliable and precise assay or determination and monitoring of a rapid, reliable and precise assay or determination and monitoring of a rapid, reliable sand precise assay or determination and monitoring of sequences and probes which are used in the exemplification of the present Detecting mutations associated with anti-HIV drug resistance comprises detecting at least one of the mutations in the HIV reverse transcriptase gene by using probes optimized to function together in a reverse-hybridization assay. Human immunodeficiency virus; HIV; reverse transcriptase; RT; enzyme; detection; mutation; anti-HIV drug resistance; polymorphism; resistance; HIV-1 reverse transcriptase mutation detection probe SEQ ID NO:881. gene by using probes optimized to function together in a reverse-hybridization assay. / Match
0.5%; Score 11.8; DB 1; Length 15;
Local Similarity 86.7%; Pred. No. 5.1e+02;
les 13; Conservative 0; Mismatches 2; Indels Sequence 15 BP; 5 A; 5 C; 2 G; 3 T; 0 U; 0 Other; Claim 2; Page 29; 117pp; English. Human immunodeficiency virus 1. ABZ34639 standard; DNA; 15 BP. 11-JAN-2001; 2001EP-00870005. 20-APR-2001; 2001EP-00870085. 24-APR-2001; 2001US-0286102P. 09-JAN-2002; 2002WO-EP000153 793 GICTCCTGTAGTAAC 807 15 Grérggrérágrák 1 (first entry) Š De Smet K, Stuyver L; (INNO-) INNOGENETICS WPI; 2002-590680/63. WO200255741-A2. 31-JAN-2003 18-JUL-2002 Synthetic. invention probe; ss ABZ34639; Query Match Matches RESULT 876 ABZ34639/c à 셤 ö Gaps . 0

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Gaps

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SAGE tags of the invention

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The present invention describes a method for detecting mutations associated with anti-HIV drug resistance in a patient by detecting at least one of the mutations K103N/R, V106A/I/L, Y181C/I, M184V/I, Y188L, G190A/S/R, T215Y/F/D/S/A and/or O151M/L in the reverse transcriptase (RT) of HIV strains in a biological sample using a specific set of probes optimised to function together in a reverse-hybridisation assay. The method and the nucleic acid sequences used in the method are useful for determining viral mutations and/or polymorphisms in the HIV RT general associated with resistance. The probes are useful for the genetic detection, preferably in virco detection of the mutations K103N/R, V106A/I/L, Y181C/I, Q151M/L, M184V/I, Y188L, G190A/S/R and/or T215Y/F/D/S/A in the RT of HIV strains in a biological sample, where the mutation is associated with anti-HIV drug resistance. The method provides a rapid, reliable and precise assay or determination and monitoring of antiviral drug resistance or mutations associated with anti-HIV drug resistance of a rapid, reliable and precise assay or ABZ34642 represent HIV RT security is associated with anti-HIV drug resistance of a rapid, resistance sand probes which are used in the exemplification of the present interest and probes which are used in the exemplification of the present
                                     2; Page 29; 117pp; English
\overset{\mathcal{A}}{\times}\overset{\times}{\times}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O}}{\circ}\overset{\mathcal{O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Sequence 15 BP; 5 A; 5 C; 2 G; 3 T; 0 U; 0 Other;

Gaps .; 0 0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; tive 0; Mismatches 2; Indels 13; Conservative Query Match Best Local Similarity Matches

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793 GICICIGIAGIAAC 807 15 Grérégierake 1 g

ABK32144 standard; DNA; 23-APR-2002 ABK32144; RESULT 877 ABK32144/

Human colon cancer SAGE tag #245. (first entry)

Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag; serial analysis of gene expression; diagnostic; prognostic; probe; cancer marker; ss.

Homo sapiens.

US6333152-B1

25-DEC-2001

98US-00081646. 20-MAY-1998;

98US-00081646 20-MAY-1998;

(UYJO) UNIV JOHNS HOPKINS

Zhou W; Zhang L, Vogelstein B, Kinzler KW,

WPI; 2002-153821/20.

as New human nucleic acid containing specific SAGE tags, useful diagnostic markers for cancer, also derived probes.

Disclosure, Col 31; 161pp, English.

The invention relates to an isolated, purified human nucleic acid (I) that has the same sequence as a mRNA found in humans and is a SAGE (serial analysis of gene expression) tag comprising a single stranded probe containing at least 10 consecutive nucleotides. SAGE tags, are diagnostic and prognostic markers of cancer, especially of the colon and pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer

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The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatities C virus (HCV). The specifically cleave RNA derived from Hepatities C virus (HCV). The carrymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV incorpars are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the obtained in electronic format directly from the USPTO web site at sequence sequence data for this patent was obtained in electronic format directly from the USPTO web site at
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                                                                                                                                                                                                                                                                                                                                                                                                         Enzymatic nucleic acid, RNA cleavage, Hepatitis C virus infection, HCV ribozyme; HCV expression, HCV replication, cirrhosis, virucide, liver failure, hepatocellular carcinoma; HCV infection, drug therapy, type I interferon; interferon alpha; interferon beta; cytostatic; interferon gamma; consensus interferon; hepatotropic; antiinflammatory; substrate; hammerhead ribozyme; HH ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New ribozymes targeting RNA derived from hepatitis C virus inhibit vireplication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.
                                                                                                                                                                                                                                                                                                                                                                        Hepatitis C virus substrate #940 for HCV hammerhead ribozyme #940.
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                                 0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; ive 0; Mismatches 2; Indels
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Sequence 15 BP; 4 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
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                                                                                                                   1105 GGCTTCAGTCCCGTG 1119
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                                                                                                                                                                                                                                                      ABX01158 standard; RNA; 15
                                                                                                                                                     GGCTTCAGTCACATG 1
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                                                                              Conservative
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MCSWIGGEN J A.
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(PAVC/) PAVCO P A.
(MACE/) MACEJACK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-617759/66
                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hepatitis C virus.
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schultz451-1.rng

Page

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Gaps

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Length 15;

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RESULT 87

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Enzymatic nucleic acid, RNA cleavage, Hepatitis C virus infection, HCV ribozyme; HCV expression, HCV replication, cirrhosis, virucide, liver failure, hepatocellular carcinoma; HCV infection, drug therapy, type I interferon, interferon alpha; interferon beta; cytostatic; interferon gamma; consensus interferon, hepatotropic; antiinflammatory; substrate; hammerhead ribozyme; HH ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                 Hepatitis C virus substrate #855 for HCV hammerhead ribozyme #855.
Score 11.8; DB 1;
Pred. No. 5.1e+02;
0; Mismatches 2;
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Query Match
Best Local Similarity 86.7%;
Matches 13; Conservative
                                                                              816 AAGCCTGGAGTGCAC 830
                                                                                                                                                                                                                 ABX01073 standard; RNA; 15
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                                                                                                                15 AAGCCACGAGTGCAC
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MCSWIGGEN J A.
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PAVCO P A.
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(PAVC/) PAVCO P A.
(MACE/) MACEJACK D.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.
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                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                      Hepatitis C virus substrate #337 for HCV hammerhead ribozyme #337.
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                                       Length 15;
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Sequence 15 BP; 4 A; 8 C; 2 G; 0 T; 1 U; 0 Other;
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                                     0.5%; Score 11.8; DB 1;
80.0%; Pred. No. 5.1e+02;
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                                                                            1; Mismatches
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                                                                                                                                                                                                                                                      ABX00555 standard; RNA; 15 BP
                                                                                                                1085 CAGGCTTCACCCCCA 1099
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                                                                          12; Conservative
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MCSWIGGEN J A.
ROBERTS B.
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                                                          Similarity
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                                                                                                                                                                                                                                                                                            ABX00555;
                                     Query Match
Best Local S
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(MCSW/)
(ROBE/)
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                                                                          Matches
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Macejack

Pavco PA,

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The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV ribozymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or replication of hepatocellular carcinoma. The HCV intozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence date for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence date for this patent did not form part of the printed specification. The complete sequence data for this patent was obtained in electronic format directly from the USPTO web site at
New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or inbozyme is in a harmerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV ribozymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or replication accolular carcinoma. The HCV infection in conjunction with one or more condition associated with HCV infection in conjunction with one or more a condition associated with HCV infection in conjunction with one or more other any therapies, particularly type I interferon. The present sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was obtained in electronic format directly from the USPTO web site at sequence can be complete sequence data for this patent was obtained in electronic format directly from the USPTO web site at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.
                                                                                                                                                                                                                                                                                                                                      Enzymatic nucleic acid, RNA cleavage, Hepatitis C virus infection, HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide; liver failure, hepatocellular carcinoma; HCV infection; drug therapy; type I interferon; interferon alpha; interferon beta; cytostatic; interferon gamma; consensus interferon; hepatocropic; antiinflammatory; substrate; hammerhead ribozyme; HH ribozyme; 8s.
Gaps
                                                                                                                                                                                                                                                                                                Hepatitis C virus substrate #131 for HCV hammerhead ribozyme #131.
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0.5%; Score 11.8; DB 1; Length 15;

Best Local Similarity 86.7%; Pred. No. 5.1e+02;

Matches 13; Conservative 0; Mismatches 2; Indels
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  Indels
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  2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Roberts B, Pavco PA,
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 25; 80pp; English.
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                                      1056 GGCCCCAAACCCAAG 1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-00274553.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-00274553
                                                                                                                                                                               ABX00349 standard; RNA; 15
                                                                            15 GCCCCAAAACCCAAG 1
                                                                                                                                                                                                                                                              23-DEC-2002 (first entry)
  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Blatt L, Mcswiggen JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J A.
(ROBE), ROBERTS B.
(PAVC/) PAVCO P A.
(MACE/) MACEJACK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-617759/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2002082225-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-JUN-2002.
                                                                                                                                                                                                                     ABX00349;
  Matches
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                                                                                                                                        RESULT
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The invention relates to reading microarray devices having addressable electrodes to determine binding between capture probe and target molecule (TM) The method involves providing an array having electrodes and capture molecules, attaching an oxidation/reduction enzymatic moiety to TM to create a prepped target sample (1), administering (1) to the array, adding a substrate to array to create a voltage, and measuring the voltage. The method is useful for reading microarray devices having a daressable electrodes to determine the binding between a capture probe and a target molecule, where the target molecule is selected from DNA, RNA, single-stranded DNA, Thosomal RNA, mitcohndrial DNA, cellular receptors, glycosylated membrane bound proteins, non-glycosylated membrane bound proteins, non-glycosylated membrane bound proteins, nolypeptides, antibodies, cellular antigenic determinants, organic molecules, metalions, salt anions and cations, and their combinations. The present sequence represents a Kras sequence used to exemplify an oligonucleotide hybridization electrochemical detection
                                                                                                                                                                                                                                                                                  Microarray device; electrode; oxidation; reduction; Kras; hybridization;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Assaying binding of target and capture molecules on microarray devices, by providing an array having electrodes and capture molecules, and enzymatically catalyzing oxidation/reduction reaction to detect current
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 2 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 12; 33pp; English.
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                                                                                                                                                                                                                                                                                                      electrochemical detection; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-AUG-2002; 2002WO-US028399.
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753 CACCIGCCAIGCAGG 767
                                                                                                                                ACC47781 standard; DNA; 15
                                                                                                                                                                                                           (first entry)
                                  15 cáccreceáceade
                                                                                                                                                                                                                                                 Kras nucleotide sequence.
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                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                    ACC47781;
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ABV93739/c
ID ABV937
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RB; Stiger TR;

ABV93739

Synthetic.

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The present invention relates to methods for screening or diagnosing Alzheimer's disease (AD) to determine the stage or severity of AD in a subject, to identify subject at risk of developing AD, or to monitor the effect of therapy administered. The methods comprise analysing a test sample of body fluid by 2-dimensional electrophoresis to generate a 2-dimensional array of AD-associated features (AFs). The method alternatively comprises quantitatively detecting in a sample of body fluid from the subject, one or more AD-associated protein isoforms (APIs, ABRS9110-ABRS9184). The present sequence is a probe, used to illustrate
                                                                                                                                                                                                                                                                                                                                                                                                                                    Screening or diagnosing of Alzheimer's disease (AD) determine the stage or severity of AD in a subject, comprises analyzing a test sample of body fluid from the subject by 2-dimensional electrophoresis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                telomerase activity, cel replication, neoplasia, cancer, age-related macular degeneration, Alzheimer's disease, atherosclerosis, telomerase, telomerase inhibitor, immortalised cell, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telomere length and/or telomerase activity related polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.5%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.1e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                           Durham LK, Friedman DL, Herath HWAC, Kimmel LH, Parekh
Potter DM, Rohlff C, Silber BM, Snyder PJ, Soares HD,
Sunderland PT, Townsend RR, White WF, Williams SA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            proliferation; cell senescence; telomere length;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 0 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                               (PFIZ ) PFIZER PROD INC.
(OXFO-) OXFORD GLYCOSCIENCES UK LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 92; 179pp; English.
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93US-00038766.
93US-00060952.
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                                                                                                                                    03-OCT-2002; 2002WO-US031642
                                                                                                                                                                                 03-OCT-2001; 2001US-0326708P
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Best Local Similarity 86.7
Matches 13; Conservative
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                                          WO2003028543-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the invention
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-JUN-1995;
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13-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-FEB-2003
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                                                                                       10-APR-2003
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ABX50038/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       쉱
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a modified Cry protein (I) that is sensitive to pepsin and comprises at least one additional pepsin cleavage setsitive to pepsin and comprises at least one additional pepsin cleavage setsitive (PCS). Also described: (a) increasing pepsin sensitivity of cry proteins by incorporating at least one extra PCS; (b) polynucleotides (II) that encode (I); (c) chimaric genes (CG) that contain a promoter, (II) and terminator; (d) expression or transformation vector (III) that contains CG; (e) host organism (IV) transformed with (III), also, where the organism is a plant, its parts and seeds; (f) production of (I) by grains (I). (I) has insecticide activity. (I) can be used as insecticides, particularly where expressed in transgenic plants. (I) are sensitive to enzymes in the digestive tract of mammals, so do not persist in the tract (lack of persistence is required by regulatory authorities for use, in foods, of seeds containing Cry proteins). Extra PCS do not insecticidal activity. ABV93460 to ABV93999 and ABB63997 to ABB68308 represent sequences used in the exemplification of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New modified Cry protein, useful as insecticide, comprises at least one additional pepsin cleavage site to reduce persistence in mammalian gut.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alzheimer's Disease-associated protein isoform, API, probe, SEQ ID 472.
                                                                                                                                  Bacillus thuringiensis; insecticide; toxin; Cry; pepsin cleavage site;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                       Bacillus thuringiensis toxin Cry related oligonucleotide Cry4Ba.
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Alzheimer's Disease-associated protein isoform; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 11.8; DB 1; Length 15;
Pred. No. 5.1e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 7 A; 2 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 4; Page 41; 134pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Frutos R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AVET ) AVENTIS CROPSCIENCE SA
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1 Similarity 86.7%;
13; Conservative (
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                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Freyssinet G, Rang C,
                                                                                                                                                                                                          Bacillus thuringiensis.
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Best Local Similarity
                                                                                                                                                             pepsin; PCS; ss.
                                                                                                                                                                                                                                                                                 FR2822157-A1
                                          08-JAN-2003
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The invention describes a method use for treating increased rate of proliferation of a cell or extending the ability of a cell to replicate, or treating a disease associated with cell senescence. The method comprises administering an agent to reduce loss of telomere length within the senescing cells. The method is useful for treating a condition associated with an increased rate of proliferation of a cell extending the ability of a cell to replicate, or for treating a cell extending the ability of a cell to replicate, or for treating a disease or condition associated with cell senescence e.g. neoplasia. A second method disclosed in the invention is useful for treating a condition associated with an elevated level of telomerase activity within a cell e.g. cancer. Also disclosed is method useful for diagnosis of a condition associated with an increased rate of proliferation in a cell in an individual e.g. age-related macular degeneration, astrocytes associated with Alzheimer's discloses and endothelial cells associated with atherosclerosis. This sequence represents a polynucleotide used in the study of telomere length
                                                                                                                                                                 Treating condition associated with cell senescence or increased rate of cell proliferation, by administering to cell an agent that derepresses telomerase in the senescing cells or that reduces loss of telomere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cell proliferation; cell senescence; telomere length; telomerase activity; cel replication; neoplasia; cancer; age-related macular degeneration; Alzheimer's disease; atherosclerosis; telomerase; telomerase inhibitor; immortalised cell; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Telomere length and/or telomerase activity related polynucleotide #63.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 0 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                    Wright W, Blackburn EH;
                                                                                                                                                                                                                                                          Example 13; Fig 18A; 86pp; English.
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93US-00038766.
93US-00060952.
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                                              WRIGHT W.
BLACKBURN
                                                                                                    Shay J,
              WEST M D.
SHAY J.
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24-MAR-1993;
13-MAY-1993;
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              (WEST/) (SHAY/) (WRIG/) (BLAC/) 1
                                                                                                  West MD,
                                                                                                                                                                                                                            length.
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Gaps .; 0

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The invention describes a method use for treating increased rate of proliferation of a cell or extending the ability of a cell to replicate, or treating a disease associated with cell senescence. The method comprises administering an agent to reduce loss of telomers length within comprises administering an agent to reduce loss of telomers length within associated with an increased rate of proliferation of a cell extending the ability of a cell to replicate, or for treating a condition associated with an increased rate of proliferation of a cell extending the ability of a cell to replicate, or for treating a disease or condition associated with cell senescence e.g. neoplasia. A second method disclosed in the invention is useful for treating a condition associated with an increased rate of proliferation in a cell in an individual e.g. with an increased rate of proliferation in a cell in an individual e.g. cape-related macular degeneration, astrocytes associated with Alzheimer's disease and endothelial cells associated with atherosclerosis. This cape activity described in the invention
                                                                                                                                                       Treating condition associated with cell senescence or increased rate of cell proliferation, by administering to cell an agent that derepresses telomerase in the senescing cells or that reduces loss of telomere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Microarray, capture probe molecule, target molecule, electrode; oxidation/reduction enzymatic moiety, voltage signal; porous reaction layer; polymeric; lateral signal; laccase; horseradish peroxidase; beta-galactosidase; glucose oxidase; alkaline phosphatase; dehydrogenase; biotin; streptavidin; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.5%; Score 11.8; DB 1; Length 15; Best Local Similarity 86.7%; Pred. No. 5.1e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 0 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                       Blackburn EH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kras target oligonucleotide molecule.
                                                                                                                                                                                                                                                      Example 13; Fig 18B; 86pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-AUG-2002; 2002US-00229755.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADD14900 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAACCCCAACCCCAA 1
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                                                                                         Wright
WEST M D.
SHAY J.
WRIGHT W.
BLACKBURN E H.
                                                                                                                          WPI; 2003-066896/06.
                                                                                         West MD, Shay J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003082601-A1.
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                                    (WRIG/) V
   WEST/)
                                                                                                                                                                                                                      length.
                      SHAY/)
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The invention discloses a method for reading microarray devices having addressable electrodes to determine binding between a capture probe addressable electrodes to determine binding between a capture probe molecule (CM) and a target molecule. The method comprises providing an molecule (CM) and a target molecule. The method comprises providing an corresponding to the electrodes, non-specifically attaching an corresponding to the electrodes, non-specifically attaching an ample for analysis to create a propped target sample, administering the prespect target sample to the atray and allowing for binding of the target molecule to CM, adding a substrate to the array that will create a local voltage signal when catalysed by the oxidation/reduction enzyme through local generation of electrochemical reagents at each electrode having a capture molecule trached to it. The array further comprises a porous reaction layer, made trached to it. The array further comprises a porous reaction layer has a cativity products such that there is little lateral signal reduction activity products such that there is little lateral signal reduction activity products such that there is little lateral signal complications and is attached to the exaget molecule is combinations, and is attached to the target molecule is combinations, and is attached to the target molecule is combinations, and is attached to the target molecule is combinations and is attached to the target molecule is combination of properties, polypeptides, polypeptides, antibody combination or the carget molecule is especially a DNA, man, single-extraded DNA, ribosomal combinatity of the above mentioned molecules. The method is useful for the target molecule of the above mentioned molecules. The method is useful for plurality of the above mentioned molecules. The method is useful for plurality of the above mentioned molecules, material ones, salt anions, cations or their combinations. The sequence presented is the krast target collecules. The inventions or their combination
                                                                                                   Reading a microarray devices comprises providing an array, attaching an oxidation/reduction enzyme to a target molecule, applying the target molecule and an enzyme substrate to the array, and measuring a voltage
                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 1; 26pp; English
                                                 WPI; 2003-777201/73.
                                                                                                                                                                                           signal.
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Sequence 15 BP; 2 A; 8 C; 2 G; 3 T; 0 U; 0 Other;

. 0 Gaps ; 0 Query Match 0.5%; Score 11.8; DB 1; Length 15; Best Local Similarity 86.7%; Pred. No. 5.1e+02; Matches 13; Conservative 0; Mismatches 2; Indels

1132 TTCACCTCCAGCTCC 1146 TACGCCTCCAGCTCC 15

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AAQ70682 standard; DNA; 16 BP. AAQ70682; RESULT 888 AAQ70682

Triplex forming oligonucleotide directed against Erb-B2 gene. (revised)
(first entry) 25-MAR-2003 15-MAR-1995

Exb-B2, upstream region; regulatory element; gene expression; triplex; antisense; inhibition; screening; identification; cancer; breast cancer; carcinoma; breast cancer; erythroleukaemia; sarcoma; ss.

3ynthetic.

The Erb-B2 gene has a purine rich segment with substantial mirror symmetry. This sequence, derived from the Erb-B2 gene is located 69 mucleotides upstream of the transcriptional start site and is the potential site of H-DNA formation. The overexpression of Erb-B2 is particularly associated with breast cancer. This triplex forming oil ground-lockide directed against Erb-B2 and its derivatives may be used in the treatment of breast cancer, erythroleukaemia and sarcoma and more generally any disease involving the expression of Erb-B2. (Updated on 25-Gaps ; 0 Composition for decreasing gene transcription - comprises oligo:nucleotide or deriv. complementary to target gene region 0.5%; Score 11.8; DB 1; Length 16; 16.7%; Pred. No. 6.2e+02; ve 0; Mismatches 2; Indels Sequence 16 BP; 1 A; 10 C; 0 G; S T; 0 U; 0 Other; Claim 12; Page 43; 71pp; English. MAR-2003 to correct PN field.) 1126 TCCACCTTCACCTCC 1140 94WO-US000348 93US-00008897 86.7%; Query Match
Best Local Similarity 86.73
Matches 13; Conservative (APOL-) APOLLON INC WPI; 1994-264018/32 Ľu M; WO9417086-A1 10-JAN-1994; 25-JAN-1993; 04-AUG-1994. Yoon K, g ð

1 récrécrécrécrée 15 AAT01926 standard; DNA; 16 RESULT 889 AAT01926

AAT01926;

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16S rRNA; KK01; primer; PCR; amplification; probe; hybridisation; P.cepacia 16S rRNA gene detection primer #47 94JP-00051739 94JP-00051739 (first entry) detection; diagnosis; ss. Synthetic. Burkholderia cepacia. 23-MAR-1994; JP07255486-A 23-MAR-1994; 03-AUG-1999 09-0CT-1995

Pseudomonas cepacia KK01 strain 16S rRNA gene - also related probes and primers, useful for specific detection of P.cepacia strain KK01. WPI; 1995-378541/49.

(CANO) CANON KK.

Claim 6; Page 3; 21pp; Japanese.

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PCR primer, human, ACE, angiotensin converting enzyme; angiotensinogen; cardiovascular status; AGT; ATI; type l angiotensin II receptor; stroke; polymorphic pattern; blood pressure; electrocardiographic profile; cardiac condition diagnosis; myocardial infarction; atherosclerosis; hypertension; cardiovascular disease; ss.
                                                                                                                                               98WO-IB000475
                                                                                                                                                                    97US-0042930P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GCCCTCGCCTCAC 15
                                                                                                                                                                                                               Norberg LT, Andersson MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA98385 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                         (EURO-) EURONA MEDICAL AB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unidentified
                                                                               Homo sapiens
                                                                                                   WO9845477-A2
                                                                                                                                               01-APR-1998;
                                                                                                                                                                   04-APR-1997;
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                                                                                                                         15-0CT-1998
                                                                    Synthetic
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pseudomonas cepacia KK01 strain 16S rRNA gene - also related probes and
primers, useful for specific detection of P.cepacia strain KK01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequences AAT01880-T02316 represent fragments of the 16S rRNA gene of Pseudomonas cepacia strain KK01 (AAT01866) which are useful as primers and probes for the specific detection of P.cepacia strain KK01
 Sequences AAT01880-T02316 represent fragments of the 16S rRNA gene of Pseudomonas cepacia strain KK01 (AAT01866) which are useful as primers and probes for the specific detection of P.cepacia strain KK01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                           Gaps
                                                                                                                                                                                                                                                                                168 rRNA; KK01; primer; PCR; amplification; probe; hybridisation; detection; diagnosis; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 6.2e+02; cive 0; Mismatches 2; Indels
                                                                   0.5%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 6.2e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence 16 BP; 4 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
                                              Seguence 16 BP; 4 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                             P.cepacia 16S rRNA gene detection primer #55.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 6; Page 3; 21pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Primer ACE/108RB for human ACE
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                                                                                                                823 GAGTGCACGAAGTTG 837
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                                                                                                                                   GAGTGCATGAAGCTG 15
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                                                                                                                                                                                            AAT01934 standard; DNA; 16
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                                                                                           13; Conservative
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                                                                                                                                                                                                                                                                                                                   Synthetic.
Burkholderia cepacia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1995-378541/49.
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                                                                                 Sest Local Similarity
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                                                                                                                                                                                                                                                                                               detection;
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Matches
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                                                                                           Matches
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ID AAV0
XX
AC AAV0
AC AAV0
DT 15-F
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converting enzyme) gene, and can be used in the method of the invention.

The method is for assessing cardiovascular status in humans by
The method is for assessing cardiovascular status in humans by
Getermining the sequence of at least one polymorphic site in the ACE
(angiotensin converting enzyme), AGT (angiotensinogen) and/or ATI (type I
cangiotensin II receptor) genes, and comparing the polymorphic pattern
with that in patients with predetermined markers of status. The method is
cused to assess blood pressure or electrocardiographic profile, to
diagnose a cardiac condition such as (silent) myocardial infarction (MI),
hypertension, atherosclerosis or stroke. They can also be used to predict
cresponse to treatments with ACE inhibitors, angiotensin II receptor
antagonists, diuretics, alpha- or beta-adrenergic receptor antagonists,
ct. It is also used to identify susceptibility to cardiovascular
cdisease. Libraries of nucleic acids containing polymorphic positions in
the 3 genes, and libraries of targets corresponding to the peptides from
the genes are used to screen for cardiovascular agents. The nucleic acids
the genes are used to be used as source of probes
                                                                                                                                                       Assessing cardiovascular status in humans by polymorphic analysis - of genes for angiotensin converting enzyme, angiotensinogen and angiotensin II receptor, used to diagnose predisposition to disease and to predict effect of therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This sequence represents a PCR primer for the human ACE (angiotensin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          conserved gene; forensic; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
Lindstroem PHR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PTEN/MMA1; amplification; genotyping; phylogenetic analysis; primer; probe;
                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 27; 71pp; English.
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This invention describes a novel method for identifying organisms by comparative genetic analysis which comprises polymerase chain reaction (PCR) amplification and subsequent genotyping and analysis of coding and/or non-coding regions, and/or functionally significant regions of highly conserved genes and/or their homologs, and/or their coDNA copies and/or their pseudogenes. The method is used for identifying animals and plants and their relatedness (phylogenetic analysis) and identifying provides rapid, simple and reproducible determination of the sequence provides rapid, simple and reproducible determination of the sequence within a selected gene region. It amplifies sequences from a wade variety of species, producing an amplicon that includes a region with high divergence between species. Since the region amplified is relatively small, even badly degraded DNA can be analysed
                                                                                                                             ig organisms by comparative genetic analysis, useful e.g. in forensic testing, comprises genotyping regions of highly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Angiotensin-converting enzyme gene; ACE; polymorphism; polymorphic marker; cardiovascular disease; myocardial infarction; unstable angina; hypertension; atherosclerosis; stroke; prognosis; drug screening; treatment outcome; human; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human angiotensin-converting enzyme (ACE) PCR primer, SEQ ID NO:9.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
0.5%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 6.2e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 16 BP; 2 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
                                          Goergens H;
                                        Koufaki ON,
                                                                                                                                                                                                                       Claim 19; Page 31; 97pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA38209 standard; DNA; 16 BP.
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98US-0104302P.
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                                          Schackert HK, Hahn M,
                                                                                                                                  Identifying organisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-318010/27.
                                                                                   WPI; 2000-587538/55.
                                                                                                                                                                          conserved genes.
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(HAHN/) HAHN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
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14-OCT-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes a novel method for identifying organisms by comparative genetic analysis which comprises polymerase chain reaction (PCR) amplification and subsequent genotyping and analysis of coding and/or non-coding regions, and/or functionally significant regions of highly conserved genes and/or their homologs, and/or their conserved genes and/or their homologs, and/or their collections. The method is used for identifying animals and plants and their relatedness (phylogenetic analysis) and identifying tissue or blood samples, or foods, e.g. in forensic tests. The method provides rapid, simple and reproducible determination of the sequence within a selected gene region. It amplifies sequences from a wide variety of species, producing an amplicon that includes a region with high divergence between species. Since the region amplified is relatively small, even badly degraded DNA can be analysed
                                                                                                                                                                                                                                                                                                                                                                                  Identifying organisms by comparative genetic analysis, useful e.g. in foods and forensic testing, comprises genotyping regions of highly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 6.2e+02; very 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 16 BP; 2 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                            Goergens H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PTEN/MMAC1 DNA PCR primer PTENex1-465 sense.
                                                                                                                                                                                                                                                                                            Koufaki ON,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 51; 97pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1245 CTCCGACCCCATCCC 1259
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99DE-01064112.
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                                                                                                                 16-MAR-2000; 2000WO-EP002330.
                                                                                                                                                          99DE-01011656.
99DE-01064112.
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hes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 CTCAGACCCCCTCCC 1
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                                                                                                                                                                                                                                                                                          Schackert HK, Hahn M,
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                                                                                                                                                                                                                            SCHA/) SCHACKERT H K.
                                                                                                                                                                                                                                                                                                                                    WPI; 2000-587538/55.
                                                                                                                                                                                                                                                                                                                                                                                                                               conserved genes.
                                                                                                                                                                                                                                                    HAHIN M.
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                          WO200055361-A2
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31-DEC-1999;
                                                                                                                                                          16-MAR-1999;
31-DEC-1999;
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                                                                       21-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                         foods and
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Best Loca Matches

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RESULT 893 AAA98651

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Gaps

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The invention relates to a novel method of assessing the cardiovascular cartains in an individual and to newly identified polymorphisms in the genes encoding angiotensin-converting enzyme (ACE) angiotensin in the additional and type 2 (ATE), angiotensinged (ACE), renin, addosterone synthase, endothelin receptor type A and beta-adrenergic receptors 1 and 2. The method comprises determining the sequence at one pattern of polymorphisms from the individual with a reference polymorphic positions within these genes, and comparing the pattern obtained from a population of individual exhibiting a predetermined cardiovascular disease status. The polymorphic markers are useful for determining the preddisposition of an individual to articovascular disorders such as myocardial infarction, unstable angina, predetermined cardiovascular status of a patient given a predicting the likely cardiovascular status of a patient given a predicting the likely cardiovascular status of a patient regimen comprising administration of cardiovascular days blockers) or calcium channel blockers). One or more polymorphic markers in predicting the likely cardiovascular status of a patient sequence of a treatment regimen. The proof of a treatment regimen. The proof of a treatment regimen of the genes comprising administration of a patient given a protocins of the genes comprising a polymorphic site may be used as blockers for high throughpur screening. The polymorphic markers in molecular cardiovascular patient. It also provides the ability to library arrays for high throughpur screening. The polymorphic patient for a particular cardiovascular patient. It also provides the ability to a liminates trial and error in adverse response, to a particular captured with a sub-populations from the readment group. Beneficial cardiovascular patient sequence response, to a particular correlated with a sub-populations from the treatment group. Beneficial correlated with a sub-populations from the readment sequences of patients required for a calininate propula
Example 1; Page 48; 126pp; English.
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Seguence 16 BP; 1 A; 9 C; 2 G; 4 T; 0 U; 0 Other; sequence determination

RESULT 896

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0.5%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels

1237 GCCCTCGCCTCCGAC 1251 1 GCCCTCGCCTCTCAC 15 ઠે

Local Similarity 86.7 ses 13; Conservative

Matches

Query Match

AAA66972 standard; DNA; 16 BP. (first entry) 19-OCT-2000 AAA66972; AAA66972, RESULT

Human leukocyte antigen A allele DNA probe A555T SEQ ID NO:30.

Human leukocyte antigen; HLA; class I allele type; probe; PCR primer; amplification; hybridisation; organ transplant; gene typing; diagnosis;

WO200031295-A1 Homo sapiens,

99WO-JP005527 07-OCT-1999;

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The present invention describes a method for distinguishing a human leukocyte antigen (HLA) class I antigen or allele by a combination of polymerase chain reaction (PCR) using a primer pair whereby all HLA-A, -B or -C alleles can be amplified or using reverse hybridisation analysis comprising a DNA probe covalently bonded to microtitre plate wells which are hybridisable specifically with the base sequence of at least one specific HLA-A, -B or -C allele. The method is applicable in gene typing, judging donor-recipient compatibility during organ transplant and correlation analysis for diagnosis of various diseases. The method is simple, rapid and accurate, with possibility of mechanisation and automation, without the problems encountered by using the prior-art techniques. AAA66943 to AAA67072 represent oligonucleotide probes and PCR primers for use in the method of the present invention
                                                                                                                                                                            Simple, rapid and accurate method for distinguishing HLA class I allele type with possibility of mechanization and automation, applicable in judging donor-recipient compatibility during organ transplant and disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                    Claim 8; Page 56; 83pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       754 ACCTGCCATGCAGGT 768
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                                          (SHIO ) SHIONOGI & CO LTD.
                                                                                         Kaneshige T;
                                                                                                                                    WPI; 2000-400097/34.
26-NOV-1998;
                                                                                                                                                                                                                                                         diagnosis.
                                                                                         Moribe T,
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Human ACE, AGT and AT1 genes polymorphisms PCR primer SEQ ID NO: 9. Human, genetic polymorphism, disease diagnosis, treatment, cancer, cafdiovascular system, nervous system, glaucoma, PCR primer, ss. AAC61209 standard; DNA; 16 BP. 99US-0126046P. 99WO-IB000497. 99US-0126243P. 23-MAR-2000; 2000WO-GB001102. 99US-00471890 (first entry) WO200056922-A2. Homo sapiens. 23-MAR-1999; 23-MAR-1999; 24-MAR-1999; 23-DEC-1999; 30-JAN-2001 28-SEP-2000. AAC61209; AAC61209

Assessing disease status in individual by determining sequence(s) at one WPI; 2000-638268/61.

Sanders

Jonsson L, Olaisson E,

Norberg LT,

Lindstrom PHR,

(GEMI-) GEMINI GENOMICS AB.

WPI; 2001-602251/68.

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                                                                                  The present invention is related to methods for determining the polymorphic pattern of an individual and using the results to determine their risk of a number of diseases, including cancer, cardiovascular diseases, glaucoma and nervous system disorders such as depression and neurodegenerative diseases. In addition, the methods can be used to determine the effects of different types of treatment for individuals, and thus enables appropriate therapies to be prescribed. THe PCR primers shown in sequences AAG61201-C61371 were all used to demonstrate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mod_base= OTHER //node= "The SY40 large T-antigen NLS sequence is linked to the 5' thymine residue by 2 copies of the 8-amino-3.6-dioxacctanoic acid linker"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= c
/mod_base= OTHER
/note= "Nucleotides 8 and 9 are separated by 3 copies of
the 8-amino-3.6-dioxaoctanoic acid linker"
 or more polymorphic positions within the human genes encoding the protein(s) involved in physiological pathway associated with treatment
                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Titmas R;
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/mod_base= OTHER
/note= "C and T are the cytosine and thymine PNA
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0
                                                                                                                                                                                                                                                                  0.5%; Score 11.8; DB 1; Length 16;
llarity 86.7%; Pred. No. 6.2e+02;
Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gene therapy vector; cell entry; intracellular trafficking; gene expression; PNA; peptide nucleic acid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Woodle M, Cheng C, Puthupparampil S, Subramanian K,
Yang J, Frei J, Mett H, Stanek J;
                                                                                                                                                                                                                                     Sequence 16 BP; 1 A; 9 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide nucleic acid NLS peptide bound DNA 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (NOVS ) NOVARTIS AG. (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
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                                                          Example 1; Page 55; 141pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                              1237 GCCCTCGCCTCCGAC 1251
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                                                                                                                                                                                                                                                                                                                                                           GCCCTCGCCTCTCAC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                  AA166199 standard; DNA; 16
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                                                                                                                                                                                                         methods of the invention
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les 13; Conserv
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA166199;
                                                                                                                                                                                                                                                                  Query Match
                            regime.
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 897
                                                                                                                                                                                                                                                                                              Matches
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The invention relates to a non-naturally occurring gene therapy vector, comprising an inner shell having a core complex containing a nucleic acid and at least one complex forming reagent. The vectors are stable having an improved outer steric layer that provides enhanced target specificity. In vivo and colloidal stability. The vectors are relatively homogeneous and comprise chemically defined species. The vectors demonstrate improved cell entry and intracellular trafficking, permitting enhanced nucleic acid therapeutic activity such as gene expression. The present sequence is that of a peptide nucleic acid for preparation of a NLS moiety coupled nucleic acid. The present sequence is linked to the SV40 large T-antigen NLS sequence (AAM51435)
                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                              Non-naturally occurring gene therapy vector useful for gene therapy, comprises an inner shell having a core complex containing a nucleic acid and at least one complex forming reagent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Determining sequence variation in, or monitoring expression of genes in target nucleic acid for high-throughput genotyping of (un)known polymorphisms/mutations, comprises hybridization pattern differences between target and probe sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-acetyltransferase 2; NAT2; human; genotyping; SNP; G191A; probe; single nucleotide polymorphism; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= a
/standard_name= "Single nucleotide polymorphism"
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0
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                                                                                                                                                                                                                                                                                                                                                                                      Score 11.8; DB 1; Length 16; Pred. No. 6.2e+02; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                  Sequence 16 BP; 0 A; 8 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                   Example 49; Page 103; 178pp; English
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10-JUL-2000; 2000US-00613517.
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                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 86.7%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                       927 TTTATCCCTCCTCTT 941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAS15504 standard; DNA; 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cronin MT, Frueh F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-616243/71.
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The invention relates to a method of simultaneously determining the presence of 2 or more sequence variations in target nucleic acids, or simultaneously monitoring expression of 2 or more genes. The method comprises determining differences in hybridisation between the target nucleic acid and immobilised probes, where differences in hybridisation between the target nucleic acid and immobilised probes, where differences in hybridisation between indicates sequence variations or transcription levels. The method is used for simultaneously determining the presence or absence of two or more sequence variations in target nucleic acids or simultaneously more sequence variations in target nucleic acids or simultaneously more participated of the complex of two or more genes in target nucleic acids. The method are applicable to high-throughput genotyping of known and unknown polymorphisms and mutations. The method maximises the information yield of hybridisation-based array applications by increasing the number of informative array-immobilised polymucleotide probes. The present sequence represents N-acetyltransferase 2 (NAT2) G191A single nucleotide probes.
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Sequence 16 BP; 2 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

Gaps ·, 0.5%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels 773 2 ccacccaderricri 16 CCATGCAGGTTTCTT Best Local Similarity Matches 13; Conserv 759 Query Match ò

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RESULT 899

ABT14523 standard; DNA; 16 ABT14523

(first entry) 03-APR-2003 ABT14523;

Rhesus monkey P-glycoprotein gene region #4.

Rhesus monkey; gene; ds; P-glycoprotein inhibitor; drug bioavailability; P-glycoprotein; P-glycoprotein transporter-related disease.

Macaca mulatta.

WO200274048-A2

26-SEP-2002

19-MAR-2002; 2002WO-US008325

19-MAR-2001; 2001US-0277095P

(GENT-) GENTEST CORP.

Hanscom SR; Crespi CL,

WPI; 2003-075423/07.

Isolated nucleic acid molecule encoding a P-glycoprotein of rhesus monkey, useful in assays for evaluating bioavailability of drugs, as well as for the optimization or discovery of drugs.

Example 1, Page 40; 103pp; English.

The invention comprises the amino acid and coding sequence of a rhesus mankey (Macaca mulatted P-glycoprotein and related P-glycoproteins. The DNA and protein sequences of the invention are useful in assays for evaluating the bioavailability of drugs, as well as the optimisation or discovery of drugs for the treament of discovery of drugs for the treament of discovery as secondated with P-glycoprotein transporter activity. The present DNA sequence represents part of the gene encoding the Rhesus monkey P-glycoprotein

BP; 3 A; 3 C; 2 G; 8 T; 0 U; 0 Other; 16 Sequence

Length 16;

Score 11.8; DB 1; Pred. No. 6.2e+02;

0.5%;

Query Match Best Local Similarity

Sequence 16 BP; 1 A; 1 C; 10 G; 4 T; 0 U; 0 Other;

the scope of the invention

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This invention relates to a novel isolated nucleic acid, gene 216, identified from human chromosome 20p13-p12. The invention also discloses regions of the 216 gene that contain single nucleotide polymorphisms (SNP's) which may be used as markers for disease susceptibility or severity. The nucleotides of the invention may have antiasthmatic, antinflammatory or anorectic activities and may be used in gene therapy. The nucleic acids, antibodies or its fragments are used in gene therapy. The nucleic acids, antibodies or its fragments are used in gene therapy. Deventing or treating a disorder, such as respiratory diseases (e.g. asthma, bronchial hyper-responsiveness, chronic obstructive pilmonary disease or adult respiratory distress syndrome), obserity, or inflammatory bowel syndrome. The nucleic acids are also useful for identifying increased susceptibility of a subject to the disorders mentioned. The nucleic acids can also be used as primers and templates for the recombinant production of disorder-associated peptides or polypeptides, for chromosome and gene mapping, or for tissue distribution studies. The present sequence represents a gene 216 specific oligonucleotide probe
                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated gene 216 nucleic acids, useful for diagnosing, preventing or treating a disorder, such as asthma, bronchial hyper-responsiveness, chronic obstructive pulmonary disease, obesity or inflammatory bowel
                                                                                                                                                                                                                                                                                                                                                              Human, mouse, ss, probe, gene 216, antiasthmatic, antiinflammatory, anorectic; chromosome 20p13-p12; single nucleotide polymorphism; SNP; gene therapy; respiratory disease, actima; obesity; bronchial hyper-responsiveness, chronic obstructive pulmonary disease, adult respiratory distress syndrome; inflammatory bowel syndrome.
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Del Mastro RG;
                                      ö
Length 16;
                                                                                                                                                                                                                                                                                                                             Human 216 gene allele specific oligonucleotide probe #47.
                                      Indels
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Score 11.8; DB 1;
Pred. No. 6.2e+02;
0; Mismatches 2;
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0
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Allen K, Pandit S;
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13-APR-2001; 2001WO-US012245.
  0.5%;
                                                                                                                  1 Trcaargrrrcgcra 15
                                                                                                                                                                                                               DNA; 16
                                                                                                                                                                                                                                                                                        (first entry)
  Query Match
Best Local Similarity 86.73
Matches 13; Conservative
                                                                           948 TTTAATGTATCGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-092960/08
                                                                                                                                                                                                               ABX75231 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200283077-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                        25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Keith T,
Simon J,
                                                                                                                                                                                                                                                      ABX75231;
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ВР

ADE43627

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Gaps

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Indels

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Mismatches

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13; Conservative

Matches

RESULT 901

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Determining a predisposition for or the occurrence of neurodegenerative disease, e.g. Alzheimer's disease by detecting in a target nucleic acid the presence or absence of an allelic variant of one or more polymorphic regions.
                                                                                                                                                            Neurodegenerative disease, uPA, SNCG, IDE, KNSL1, LIPA, TNFRSF6, Alzheimer's disease, neuroprotective, nootropic, gene therapy, Chromosome 10, PCR, primer, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Elliott KJ, Wang X, Ta
Sampson AJ, Blacker DL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 3; Page 288; 848pp; English.
                                                                                                                         Human KNSL1 PCR primer, SEQ ID 232.
                                                                                                                                                                                                                                                                                                                                                                                                               25-OCT-2001; 2001US-0339525P.
08-NOV-2001; 2001US-0336929P.
08-NOV-2001; 2001US-0338010P.
09-NOV-2001; 2001US-0338383P.
28-MAR-2002; 2002US-0368919P.
                                                                                                                                                                                                                                                                                                                                                                          25-OCT-2002; 2002WO-US034679
ADE43627 standard; DNA; 16
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                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (NEUR-) NEUROGENETICS INC. (GEHO) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Velicelebi G,
, Mullin KM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                        WO2003054143-A2.
                                                                                                                                                                                                                                                  Homo sapiens.
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                                                                                 29-JAN-2004
                                                                                                                                                                                                                                                                                                                                03-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Becker KD,
                                         ADE43627;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to treating viral infection or reactivation comprising contacting an individual with an antagonist of the interaction between a Herpes Simplex viras (HSV) polymorlectide appearing as ADD07153 and interferon regulatory factor—1 (TRF—1, a transcription factor of the interferon regulatory factor—1 (TRF—1, a transcription isolated HSV polymorlectide comprising ADD07153, a composition comprising a HSV polymorlectide comprising ADD07153, a composition comprising of compounds capable of inhibiting specific binding of IRF—1 to a polymorlectide, screening for compounds capable of inhibiting specific binding of IRF—1 to IRF—1:IRF—BP (Undefined) complex, a compound capable of agonising or antagonishing any compound in IRF—1 and/or interferon of agonishing or antagonishing any compound in IRF—1 and/or interferon binding site consensus sequence. The method is useful for treating infection or reactivation caused by Herpes virus, e.g., HSV-1 or HSV-2 infections and for cytomegallovirus, Espetein Sarr virus and soster virus infections. The HSV polymeptide and polymorlectides may also be useful at the HSV polymeptide and polymorlectides may also be useful at the HSV polymeptide and polymorlectides may also be useful at the HSV polymeptide and polymorlectides may also be useful at the HSV polymeptide and polymorlectides.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treating infection or reactivation caused by Herpes virus comprises using antagonist of Herpes Simplex virus polynucleotide sequence and interferon regulatory factor-1.
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                                                                                                                                                                                                                                                                                                                           ds; interferon regulatory factor; IRF-1; IRF-2; herpes; antiviral; transcription factor; virucide; vaccine; interferon.
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86.7%; Pred. No. 6.2e+02;
rative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 16 BP; 2 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure, SEQ ID NO 66, 53pp; English.
                                                                                                                                                                                                                                                                                 Zoster virus IRF-1 binding site #25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SMIK ) SMITHKLINE BEECHAM CORP,
             1058 CCCCAAACCCAAGCT 1072
                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99US-00424348.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-2002; 2002US-00108164.
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                                                                                                                                                        ADD07218 standard; DNA; 16
                                                                                                                                                                                                                                            (first entry)
                                                    15 CCCCCAACCCCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                         Human herpesvirus 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-801223/75.
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                                                                                                                                                                                                                                                                                                                                                                                                                                 JS2003104356-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-NOV-1999;
                                                                                                                                                                                                                                            01-JAN-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berger SL;
                                                                                                                                                                                                    ADD07218;
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Bertram L;

Tanzi RE,

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The present invention relates to a method (M1) for determining a predisposition for or the occurrence of neurodegenerative disease in a predisposition for or the occurrence of neurodegenerative disease in a subject. The method comprises detecting in a target nucleic acid obtained from the subject the presence or absence of an allelic variant of one or more polymorphic regions of one or more genes selected from upA (Urokhase plasminogen activator), SNCG (gamma-synuclen), IDE (insulinderading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (1900smal acid 19pase), and TNFRSF6 (Tumour Necrosis Pactor Receptor-SP6), where the presence of at least one of the allelic variant of one or more polymorphic regions is indicative of a predisposition for or the cocurrence of neurodegenerative disease. The genes are all located on chromosome 10. M1 is useful for determining a predisposition for or the cocurrence of, and for treating neurodegenerative disease, particularly alzhahmer's disease. The present sequence is a PCR primer, which was used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Segmence 16 BP; 2 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
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ADB43905/c
ID ADB43905 standard; DNA; 17
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Best Loca Matches

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RESULT 902

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Page 433
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Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8355.

29-MAY-2002 (first entry)

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primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                    New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                       cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
                                                      Tumour suppression/reversion associated nucleotide #4228
                                                                                                                                                                                                                                                                                                        Disclosure; Page 526; 771pp; French.
                                                                                                                                                                                                                                  Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        expression of the nucleotides.
                                                                                                                                                                                                               (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                           .7-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                            17-SEP-2001; 2001FR-00011981.
                          (revised)
(first entry)
                                                                                                                                                                                                                                relerman A, Amson R,
                                                                                                                                                                                                                                                   WPI; 2003-441574/41.
                                                                                                                                      WO2003040369-A2.
                                                                                                                     Homo sapiens.
                                                                                                                                                        15-MAY-2003.
                          18-DEC-2003
                                   04-DEC-2003
                                                                                                   diagnosis.
        ADB43905;
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fragments of at least 15 consecutive nucleotides sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (the nucleotides (also vectors containing the mand any or sequence).

(Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, containing the mandor their specific interactive molecules.

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0
                                    0.5%; Score 11.8; DB 1; Length 17; 36.7%; Pred. No. 7.4e+02; ve. 0; Mismatches 2; Indels
                                                                             2; Indels
Sequence 17 BP; 1 A; 7 C; 1 G; 8 T; 0 U; 0 Other;
                                                        86.78;
                                  Ouery Match
Best Local Similarity 86.7
Matches 13; Conservative
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364 AGGGAGAAGAGAGAT 378 16 AGGAAGAAGAGGGAT

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ABN08363 standard; DNA; 17 RESULT 904 ABN08363 SYXX

ABN08363

ВР.

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Gaps

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0.5%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 7.4e+02; tive 0; Mismatches 2; Indels

13; Conservative

Similarity

Query Match Best Local S: Matches 13;

Sequence 17 BP; 5 A; 2 C; 9 G; 1 T; 0 U; 0 Other;

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The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used as probes to detect, characterise and quantify and vaccine production. The hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for provide initial substrates for the recombinant engineering of hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP and/or amount specifically of hGDMLP-1 proteins, as specific biomolecule and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser describing the concentration and/or amount supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production and and skeletal muscle disorders hGDMLP-1 may be used for diagnosing a disorder sequence represents an oligomer used in the screening of the horsent captured for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO captures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-11ke protein hGDMLP-1.
                                                                    Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shannon ME;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 8355; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hanzel DK,
                                                                                                                                                                                                                                                                                                                                           04-0CT-2000; 2000GB-0024263.
30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000666.
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2000US-0236359P
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2001US-0266860P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-179446/23.
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                                                                                                                                                                                 WO200192524-A2
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(first entry)

12-JUN-2003

ABT35836;

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                                                                                                                                                                                                                                                                                              Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ7; MDZ1; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                present invention relates to novel human zinc finger-containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 4 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                          Human MDZ7 scanning oligonucleotide SEQ ID 5329.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 8; SEQ ID NO 5329; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 906
ABT35836/c
ID ABT35836 standard; DNA; 17 BP.
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1713 GCAAGCAGGAGCTAG 1727
                                                                                                                                     ADB04343 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JUL-2002; 2002EP-00016874.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gu Y, Nguyen C;
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                                                                                                                                                                                                                (first entry)
                                 1 GCAAGGAGGAGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-423107/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
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                                                                                                                                                                                                                20-NOV-2003
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                                                                                             RESULT 905
                                                                                                                    ADB04343
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The invention relates to a novel isolated 17 mer nucleic acid sequence, containing at least 15 consecutive nucleotides from the 17 mer sequence with, after optimal nucleotides from the 17 mer sequence with, after optimal nucleotides from the 17 mer sequence, a sequence that nucleic sequence that nucleic as the corresponding RNA. The novel isolated nucleic of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticials for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell diseases that an analysis of the expression of the 17 mer nucleic acids in patient samples is useful for disagnosis and/or prognosis of these content samples is useful for disagnosis and/or prognosis of these chosen the polypeptides can also be used to generate antibodies and choice content an uncleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression can be used human fukutin oligomucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                          Cytostatic, virucide, neuroprotective, nootropic, neuroleptic, gene chip, antisense, sense, tumour, cell degeneration, cancer, Alzheimer's disease; schizophrenia, protein chip, gene therapy, tumour suppression, human fukutin, ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                  Tumour suppression related human fukutin oligo SEQ ID No 1473
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86.7%; Pred. No. 7.4e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 1 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 205; 720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tuijnder M;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MOLE-) MOLECULAR ENGINES LAB
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Best Local Similarity
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                                                                                                                                                                                                                                                Homo sapiens
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Synthetic

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo int/pub/published_pct_sequences
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                                                                                                                                                                             Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 131850; 29pp + Sequence Listing; German.
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Best Local Similarity 91.7%; Pred. No. 3.7e+02;
Matches 11; Conservative 1; Mismatches 0;
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                 07-APR-2000; 2000DE-01019173
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                                                         (EPIG-) EPIGENOMICS
                                                                                                                                       WPI; 2001-657177/75
                                                                                                                                                                                                                            methylation status.
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                                                                                                    olek A,
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                                                                                                    Breast cancer; malignant transformation; diagnostic; therapeutic;
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                                                            Human breast cancer gene CH1-9al1-2 primer pch1-t7-5f
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96WO-US009286.
96US-0019202P.
96US-00678280.
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Les 13; Conservative
                                                                                                                            screening; primer; ss.
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Length 13;

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Sequence 13 BP; 3 A; 7 C; 0 G; 2 T; 0 U; 1 Other;
ftp.wipo.int/pub/published_pct_sequences
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                                         This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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designed to detect single-nucleotide polymorphisms and cytosine
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  Claim 1; SEQ ID NO 131849; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Score 11.6; DB 1; Length 13; Pred. No. 3.7e+02; 1; Mismatches 0; Indels
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   ch 0.5%;
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Best Local Similarity ?
...-rheg 11; Conservat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                 ABC32186;
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AAS19718;

RESULT 912

AAS19718

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This sequence represents a PCR primer for the FWR1 gene. This sequence was used to amplify Fragile XA related alleles from the FWR1 gene. The invention relates to a method for characterising a GC rich region of a nucleic acid comprising contacting the nucleic acid with an agent that modifies C or G into residues complementary to A or T, amplifying (at least part of) the resultant modified nucleic acid, and determining the size of the amplification product. The methods and kits for carrying the the methods are useful for characterising GC rich nucleic acids. This is particularly useful for characterising GC rich nucleic acids. This is particularly useful for diagnosing trinuclectide repeats associated with regions (FRAXB), spinal and bulbar muscular arrophy (SMBA), myotonic dystrophy (DM), Huntington's disease (HD), spinal and contaction (FRAXB-MR) and dentactular pallidoluysian atrophy (DRAXB-MR). Current methods of nucleic acid sequencing are hampered by the formation of stable secondary structures in GC rich regions which hamper the sequential incorporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Characterizing GC rich regions of a nucleic acid comprising modifying GC residues into residues complementary to A or T, and amplifying the modified product, useful for diagnosing trinucleotide repeats.
Huntington's disease; DM; HD; spinocerebellar ataxia type 1;
fragile XE mental retardation; dentatorubral pallidoluysian atrophy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, growth hormone 1, GH-1, single nucleotide polymorphism, SNP,
gene therapy, PCR, primer, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 11.6; DB 1; Length 18; 77.8%; Pred. No. 9.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18 BP; 2 A; 0 C; 10 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human GH-1 gene amplifying PCR primer, CRV156.1tl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of nucleotides to a growing duplexed chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 4; Page 45; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   293 TGGTGCTCCTGGAGCTGT 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TGGTGGTGATGGAGGTGT 18
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                                                                                                                                                                                                                                                            99US-00236097.
                                                                                                                                                                                                                 24-JAN-2000; 2000WO-US001475.
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Best Local Similarity 77.8%;
Matches 14; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                    Navot N, Lederkremer M;
                                                                                                                                                                                                                                                                                                          (GAMI-) GAMIDA GEN LTD.
(FRIE/) FRIEDMAN M M.
                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-482916/42.
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                                                                                                                     WO200043531-A2
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                                                                          Homo sapiens.
                                                                                                                                                                                                                                                               25-JAN-1999;
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                                                                                                                                                                   27-JUL-2000.
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AAL60009
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
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0
                                                                                                                                                                                                                                   Human; single nucleotide polymorphism; SNP; RANGAPI; haplotyping chromosome 22d13.2413.31; Ran GTPase activating protein 1; genotyping; cancer; irregular cell cycle associated disorder; ASO; probe; ss; allele-specific oligomocleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to novel single nucleotide polymorphisms (SNPs) in the human Ran GTPase activating protein 1 (RANGAP1) gene flocated on chromosome 20413.2-413.4, and methods for haplotyping and/or genotyping the RANGAP1 gene. The methods of the invention make use of allele-specific oligonucleotides (ASOs) as probes and primers and/or polymorphisms. The polymucleotides for detecting the RANGAP1 gene treatment of diseases associated with RANGAP1 activity, such as cancer and other disorders associated with an irregular cell cycle. AAS19704-AAS19742 represent ASO probes for detecting human RANGAP1 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR primer; FWR1 gene; fragile XA related allele; GC rich region; FRAXA; diagnosis; trinucleotide repeat; Fragile XA syndrome; FRAXE-MR; SMBA; spinal and bulbar muscular atrophy; myotonic dystrophy; DRAPLA; SCAl;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genotyping human Ran GTPase activating protein 1 gene of individual for determining haplotype of individual, involves determining identity of nucleotide pair at specific polymorphic sites for two copies of the gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ch 0.5%; Score 11.6; DB 1; Length 15; 1 Similarity 91.7%; Pred. No. 5.8e+02; 11; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                       probe #15 to detect human RANGAP1 gene polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 2 A; 7 C; 3 G; 2 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 15; Page 14; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR primer PFX52U for FMR1 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GENA-) GENAISSANCE PHARM INC.
                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-APR-2001; 2001WO-US012455.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-APR-2000; 2000US-0198072P.
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                                             AAS19718 standard; DNA; 15
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                                                                                                                                            08-MAY-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                              WO200179240-A2.
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                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
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Chew A,

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AAA37653;

RESULT 913

AAA37653

1181 m

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Query Match

Matches

nucleic

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Gaps

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Length 20; 4; Indels

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control profileration of endometrial strong, by expressing 11AZI polypeptide. The methods of the invention can be used to identify a compound which conclusion of endometrial strong, by expressing 11AZ in the presence of the compound, and determining whether the compound affects expression of jiAZ. jAZFI, jjAZI or jAZFI/jjAZI polypeptides are useful as mimunogens or antigens to raise or test anti-jAZFI or as immunogens or antigens to raise or test anti-jAZFI jiAZI or two hybrid assay or three hybrid assay to identify other proteins in a two hybrid assay or three hybrid assay to identify other proteins which bind or interact with jAZFI/jjAZI-binding proteins, jAZFI, jjAZI or cas tumour marker protein to verify that a stromal tumour is from endometrium. The antibody is useful for identifying the origin of tumour and compension, and also for treating endometrial stromal tumours. The present nucleic acid sequence represents a PCR primer that was used in the the mann jAZFI gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A novel fusion protein comprises 2 dimer forming co-expressed amino acid sequences, each consisting of a homodimeric or heterodimeric receptor chain or ligand, with ligand-receptor binding activity, bound directly or via a peptide linker to a subunit of a heterodimeric protein hormone capable of forming a heterodimer with the hormone's other subunits. The fusion protein, e.g. the thrombopoietin (PPO) human chorionic gonadotrophin (hCG) fusion protein encoded by the fusion gene amplified by the present sequence, significantly increases the biological activity of the hormone component, reducing the requirement for hormone itself and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fusion protein, thrombopoietin, TPO, human chorionic gonadotrophin, hCG;
PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hybrid dimeric protein comprising two co-expressed units - each based or receptor or ligand and a subunit of a heterodimeric hormone, especially FSH, for inducing follicular maturation.
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 3 A; 10 C; 0 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.6; DB 1;
Pred. No. 1.2e+03;
0; Mismatches 4;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1014 TGAAAAGAGGGGGGGCT 1031
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Primer for TPO/hCG fusion gene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAAGAGGAGGGGTGAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.5
Best Local Similarity 77.8
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                         located on chromosome 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             916
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AAT94017
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                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to growth hormone 1 (GH-1) gene including single mucleotide polymorphisms (SNP). The GH-1 diagnostic polymucleotide is useful as markers for the analysis of a disease, of susceptibility to drug treatment for GH-1 dysfunction or other diseases, or may be included in any complete or partial genetic map of the human genome. GH-1 mutant polypeptides are useful as antagonists of GH-1 hormone action. Polymucleotides encoding these polypeptides are useful in gene therapy. The present sequence is a PCR primer used for amplifying human GH-1 gene
                                                                                                                                                                                                                                                 New growth hormone 1 (GH-1) diagnostic polynucleotide, useful as markers for the analysis of a disease, or of susceptibility to drug treatment for GH-1 dysfunction or other diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, jAZF1, juxtaposed with another zinc finger, jjAZ1, jAZF1/jjAZ1, joined with jAZF1, proliferation, endometrial stroma tumour, immunogen, antigen, antibody, fertility, pregnancy, gene therapy, vaccine, PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel jAZF1, jjAZ1 or jAZF1/jjAZ1 polypeptides useful as immunogens or antigens to raise or test anti-jAZF1, jjAZ1 or jAZF1/jjAZ1 antibodies.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match 0.5%; Score 11.6; DB 1; Length 20; Local Similarity 77.8%; Pred. No. 1.2e+03; es 14; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 2 A; 9 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BGHM ) BRIGHAM & WOMENS HOSPITAL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human jAZF1 PCR primer 7SenseInner.
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                                                                                                                                                                                                                                                                                                                                                       Example 2; Page 30; 74pp; English.
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                                                                                                                                                            Parodi LA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                         (PHAA ) PHARMACIA & UPJOHN CO.
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               07-NOV-2002; 2002WO-US035719
                                                             09-NOV-2001; 2001US-0347448P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABK89166 standard; DNA; 20
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                                                                                                                                                         Wood LS, Wagner S,
                                                                                                                                                                                                        WPI; 2003-449555/42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Koontz J, Sklar J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200193805-AZ.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABK89166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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Matches
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Gaps

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course of the invention for the multimerisation of minimal motifs. The invention provides a method for increasing the resistance of a core protein to proteint or protein to protein to protein a stabilising polypeptide of formula or into the core protein a stabilising polypeptide of formula on to into the core protein a stabilising polypeptide of formula or into the core protein a stabilising polypeptide of formula on the core protein a stabilising polypeptide of formula on the part of the core protein of the invention are 1-6 sequential Gly residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Thr and nean be anything between 1-66. X, Y and Z need not be identical from nepeat to repeat Alternatively a nucleic acid encoding a stabilising polypeptide can be linked onto or inserted into a nucleic acid encoding polypeptide can be linked onto or inserted into a nucleic acid encoding a core protein. The fusion proteins of the invention are more resistant to degradation by proteases and, thus, have a longer half-life than the unfused core protein. The products can be used for treating autoimmune an IkappaB regulator protein for the treatment of inflammatory bowel disease, or a nitroreductase protein which can activate nitro drugs in canyae/producy bherapy to treat cancer or other pathological conditions. The fusion proteins can also be used in diagnostic methods such as in vivo imaging. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New fusion proteins resistant to proteolytic degradation - comprising a core protein with a stabilising polypeptide comprising a peptide sequence containing glycine repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fusion protein; stabilising polypeptide; proteolytic degradation; resistance; half-life; autoimmune disease; inflammation; nitro drug; lkappas regulator protein; inflammatory bowel disease; in vivo imaging; nitroreductase protein; enzyme therapy; prodrug therapy; protease; cancer; pathological condition; minimal motif; PCR primer; ss.
                                                                            Query Match 0.5%; Score 11.6; DB 1; Length 21; Best Local Similarity 77.8%; Pred. No. 1.4e+03; Matches 14; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Multimerisation of minimal motifs using primer ZGR2.
                                       Sequence 21 BP; 2 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 72; 120pp; English
the number of injections needed
                                                                                                                                                                                                           3 regrectreadrecreag 20
                                                                                                                                                                      35 TGGAGCCTCAGTCCAGAG 52
                                                                                                                                                                                                                                                                                                                      AAV55817 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97WO-IB001508.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96US-0030986P.
97US-0048945P.
                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human herpesvirus 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MASU/) MASUCCI M G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1998-312463/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .5-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9822577-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-MAY-1998.
                                                                                                                                                                                                                                                                                                                                                                                                              27-AUG-2003
18-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Masucci MG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                    AAV55817;
                                                                                                                                                                                                                                                                              RESULT 91
                                                                                                                                                                                                                                                                                                                                               SXS
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                                                                                                                                                                                                                                                                                                                                               Tumour necrosis factor binding protein; TNF; insoluble protein; agonist; anti-inflammatory; antimalarial; treatment; septic shock; inflammation; autoimmune glomerulonephritis; cerebral malaria; immune response; antagonist; diagnosis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          necrosis
                                                                                                                                                                                                                                                                                                                     Human 55kDa tumour necrosis factor binding protein PCR primer 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New insoluble proteins, and fragments, that bind to tumor ne
factor, used to treat e.g. septic shock or cerebral malaria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 11.6; DB 1; Length 29; llarity 77.8%; Pred. No. 1.7e+03; Conservative 0; Mismatches 4; Indel8
                                        24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dembic Z, Gentz R, Lesslauer W, Loetscher
                                                                    4; Indels
                                        Length
           Sequence 24 BP; 3 A; 14 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 29 BP; 5 A; 7 C; 9 G; 8 T; 0 U; 0 Other;
                                     Score 11.6; DB 1;
Pred. No. 1.7e+03;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HOFF ) HOFFMANN LA ROCHE & CO AG F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 11; Page 16; 25pp; German.
                                                                                                     301 CTGGAGCTGTTGGTGGGA 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   89CH-00003319.
90CH-00000746.
90CH-00001347.
                                                                                                                         18 CTGGAGGTGCGGGTGGAA 1
                                                                                                                                                                                                              멾.
                                        0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99EP-00100703
                                                                                                                                                                                                            AAZ09169 standard; DNA; 29
                                                                                                                                                                                                                                                                         (revised)
(first entry)
                                                                        14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-480840/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query'Match
Best Local Similarity
Matches 14; Conserv
                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-SEP-1989;
08-MAR-1990;
20-APR-1990;
31-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Brockhaus M,
Schlaeger E;
                                                                                                                                                                                                                                                                       20-MAR-2003
18-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EP939121-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                           AAZ09169;
                                                          Best Loca
Matches
                                                                                                                                                                                                 AAZ09169
                                                                                                                                                                                  RESULT
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TGGAGCCTCAGTCCAGAG

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Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver; resistance; chemotherapeutic agent; colchicine; doxorubicin; colon; actinomycin D; vinblastine; stall intestine; kidney; adrenal gland; adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia; human; chronic myelogenous leukemia; CML; follicular lymphoma; human; chronic myelogenous leukemia; reset cancer; colon carcinoma; neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif; hairpin; hepatitis delta virus; group I intron; RNaseP; leukaemia; ss.

Neuroblastoma specific mRNA ribozyme cleavable nucleotide (923).

(revised)
(first entry)

25-MAR-2003 26-MAY-1994

AAQ52203;

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This invention describes novel insoluble proteins (1), also their (in) soluble fragments and pharmaceutically acceptable salts, able to bind tumor necrosis factor (TNF) and in homogeneous form. The products of the invention have antiinflammatory, immunosuppressive, antibacterial, antiprotozoal activity. (1), and related recombinant proteins, are used set in the diseases mediated by TNF, e.g. shock in cases of meningococcal sepsis, development of autoimmune glomerulonephritis and cerebral malaria. Also (1), or antibodies specific for them, are used for diagnostic determination of TNF in body fluids, for affinity purification of TNF and for identifying (ant) agonists of TNF. This sequence represents a PCR primer used in the amplification of the human 55 kD TNFRPP described in the method of the invention
                                                                                                                                                                                                                                 TNF; tumor necrosis factor binding protein; TNFBP; treatment; insoluble protein; antiinflammatory; immunosuppressive; antibacterial; antiprotozoal; treatment; meningococcal sepsis; cerebral malaria; autoimmune glomerulonephritis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New homogeneous, insoluble proteins that bind tumor necrosis factor (TNF), useful for treating TNF-mediated disorders, e.g. inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Loetscher
                                                                                                                                                                                                      Human 55 kD TNFBP extracellular fragment PCR primer 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seguence 29 BP; 5 A; 7 C; 9 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R, Lesslauer W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (HOFF ) HOFFMANN LA ROCHE & CO AG F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 11; Page 16; 26pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dembic 2, Gentz
                                                                                                                                                                                                                                                                                                                                                                                                                                              89CH-00003319.
9DCH-00000746.
9DCH-0001347.
9OEP-00116707.
                    29
                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                   2001EP-00108117
                  AAH48858 standard; DNA; 29
                                                                                                                                                                     12-NOV-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-559312/63.
                                                                                                                                                                                                                                                                                                                                                                                                                                             12-SEP-1989;
08-MAR-1990;
20-APR-1990;
31-AUG-1990;
31-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                    EP1132471-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                 31-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Brockhaus M,
Schlaeger E;
                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                 12-SEP-2001
35
                           12
                                                                                                                                        AAH48858;
                                                                           RESULT 919
                                                                                            AAH48858
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9205-00862885-9205-00862885-9205-00936421-9205-00936421-9205-00936531-9205-00936531-9305-00987131-9305-0006122-

14-MAY-1992; 14-MAY-1992; 26-AUG-1992; 26-AUG-1992; 26-AUG-1992; 26-AUG-1992; 26-AUG-1992; 26-AUG-1992; 19-JAN-1993;

(RIBO-) RIBOZYME PHARM INC

Draper KG;

Thompson JD,

93WO-US004573

13-MAY-1993;

25-NOV-1993.

Homo sapiens WO9323057-A1

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The sequences given in AAQ51825-2266 represent areas of mRNAs which are associated with development or maintenance of chronic myelogenous content associated with development or maintenance of chronic myelogenous content as a content of the full pength as a containing these ranget sequences, encode aberant cellular proteins which are able to control cellular proteins and lung cancer. The full length mRNAs containing these target sequences, encode aberant cellular proteins which are able to control cellular proliferation and are directly linked to a leukemic phenotype. These target sequences are colonistically the tarboxyme of the invention. The riboxymes is formed in a hammerhead motif, but may also be formed in the motif of a hairpin, contained and the man and other animals by modulating expression of a transformed colls and transformed cells and that animals by modulating expression of the maturity end transformed state.

Whitiple drug resistance (mdr-1) mRNAs peorific riboxymes remove the mechanism of drug resistance used by transformed cells and thus enhances contain the animals may also be used to study genetic drift and mutations within cells. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated with tumours or mRNA expressed from gene encoding multiple drug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 13 BP; 2 A; 8 C; 2 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 3; Fig 10; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1993-386203/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             with tumour resistance.
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0.5%; Score 11.4; DB 1; Length 13; 84.6%; Pred. No. 4.2e+02;

Query Match Best Local Similarity

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Gaps 0,

0.5%; Score 11.6; DB 1; Length 29; 77.8%; Pred. No. 1.7e+03; tive 0; Mismatches 4; Indels

TGGAGCCTCAGTCCAGAG 52

32 12

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Local Similarity 77.8 ses 14; Conservative

Best Loca Matches

Query Match

29

TGGTGCCTGAGTCCTCAG

a

BP.

RESULT 920 AAQ52203 ID AAQ52203 standard; RNA; 13

Tue Mar

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441
Page
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Gaps ..

Pred. No. 4.2e+02; 0; Mismatches 1; Indels

92.3%;

Best Local Similarity 92.3 Matches 12, Conservative

, 965 AACGGTGGAAGTC 977

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The invention relates to polynucleotide inhibitors (I) and methods for inhibiting telomerase activity. (I) are useful in inhibiting telomerase activity. (I) are useful in inhibiting telomerase activity and poliferation of a telomerase positive cell, and in manufacturing a medicament for inhibiting telomerase activity in a cell and in treating telomerase-mediated condition or disease, such as adenocarcinoma of breast, prostate or colon, mixed cell leukaemia, adenocarcinoma of breast, prostate or colon, mixed cell leukaemia, cuseful in treating a tumour or in manufacturing a medicament for the useful in treating a tumour or in manufacturing a medicament for the circatum of tumour. The polynucleotide inhibitors may also be used in diagnostic assays for detecting RNA or DNA. Inhibition of telomerase cutvity in cells in vivo is useful in prophylactic and therapeutic methods of treating cancer and other disorders involving inappropriate expression of telomerase, and in treating veterinary proliferative diseases. Inhibition of telomerase in haematopoietic stem cells is useful for immunosuppression and for selectively down-regulating specific branches of the immune system. The present sequence represents human invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New polynucleotide useful for inhibiting telomerase activity in cells, or for treating telomerase-mediated condition or disease, such as cancers, tumors, Hodgkin's disease, or inflammatory conditions.
                                                                                                                                                                                                                                                                                                       Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma; breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease; fertility; inflammatory condition; tumour; cancer; veterinary; immunosuppression; telomerase inhibitor; ss.
Gaps
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mod_base= OTHER
/note= "N3'-P5' phosphoramidate linkages"
Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 13 BP; 4 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
۲;
                                                                                                                                                                                                                                                                      Human telomerase polynucleotide inhibitor #2.
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Weinrich SL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
1. .13
/*tag= a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-MAR-2001; 2001WO-US010476.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAR-2000; 2000US-00540119.
                              1087 GGCTTCACCCCCA 1099
                                                                                                                                                          AAS15921 standard; DNA; 13
                                                                                                                                                                                                                                 27-FEB-2002 (first entry)
                                                       1 GGCCUCACCCCCA 13
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gryaznov SM, Pruzan R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-656955/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GERO-) GERON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                             AAS15921;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention
                                                                                                                         921
                                                                                                                       RESULT 9
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0.5%; Score 11.4; DB 1; Length 13;

Query Match

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The invention relates to novel immunogenic CpG oligodeoxymucleotides (AAC80581-C80723). The oligonucleotide are at least 10 bases long and comprise one of the generic sequences 5-NNNT-CpG-WNNN-3' or 5'-RY-CpG-RY -3'. The central CpG motif is unmerthylated, and the oligonucleotides optionally have phosphorothioate linkages which make them more resistant to degradation. The invention also relates to an oligonucleotide delivery complex comprising an oligonucleotide of the invention and a targetting agent, and a pharmaceutical composition comprising the oligonucleotide delivery complex. The oligonucleotides are able to induce either a cellmediated (T-cell) response or a humoral [B-cell, antibody) response, with oligonucleotides are able to induce a cellmediated response or a humoral response or a humoral response or a humoral response or a nuclear complex that after administration, the oligonucleotide acts on antigen-presenting cells celling to activation of natural killer (NK) cells. A cell-mediated or humoral response can then occur by activation of T or B-cells. The humoral response is useful for treating, preventing or meliorating an allergic reaction (preferably asthma), or an infection, where an immunogenic CpG oligonucleotide is administered either alone or
                                                                                                                                                                                                                                                                       Opd oligodecxynucleotide, unmethylated, antigen-presenting cell, immunogenic; cytokine release, natural killer cell; NK cell activation; cell-mediated immune response; T-cell response; humoral response; B-cell response; antibody production; immune response induction; vaccine; allergy; asthma; infection; bacterial; viral; fungal; protozoal; parasitic; tuberculosis; AIDS; autoimmune disease; lupus erythematosus; rheumatoid arthritis; multiple solerosis; solid tumour; cancer; immune deficiency; biological warfare agent; cytostatic; antiarthritic; antimicrobial; antiallergic; protozoacide; tuberculostatic; antiarthritic; antiasthmatic; dermatological; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel oligonucleotides useful for the prevention and treatment of allergies, cancer, and autoimmune disorders and for ameliorating symptoms resulting from exposure to a bio-warfare agent.
                                                                                                                                                                                                                                     Immunogenic CpG oligodeoxynucleotide, SEQ ID NO:103.
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                                                                                                      AAC80683 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-APR-2000; 2000WO-US009839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-APR-1999; 99US-0128898P
                                                                                                                                                                                            (first entry)
1 AACGGTGGAAGGC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Klinman D, Ishii K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (KLIN/) KLINMAN D.
(ISHI/) ISHII K.
(VERT/) VERTHELYI D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-006880/01.
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                                                                                                                                                                                         14-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                   AAC80683;
                                                             RESULT 922
AAC80683/c
g
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In combination with an anti-allergenic agent or anti-infectious agent. The allergic conditions which may be treated include eczema, allergic conditions, and the infections which may be treated include viral conditions, and the infections which may be treated include viral, bacterial, fungal and protozoal infections such as tuberculosis, AIDS, leishmania and schistosomiasis. Immune response induction may also be used in the treatment of an autoimmune disorder (e.g., lupus erythematosus, rheumatoid arthritis and multiple sclerosis) a disease associated with immune system deficiency, and symptomes resulting from exposure to an agent of biological warfare. An immunogenic CpG oligonucleotide, either alone or in combination with an anti-cancer agent, is useful for treating solid tumour cancer. The induction of an immune response is used in antisense therapy and to improve the efficacy of a vaccine. The oligonucleotide is preferably administered to Impunogenic CpG oligodeoxynucleotide of the invention
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88888888888888888888888888888

Sequence 13 BP; 1 A; 5 C; 2 G; 5 T; 0 U; 0 Other;

Match 0.5%; Score 11.4; DB 1; Length 13; Local Similarity 92.3%; Pred. No. 4.2e+02; les 12; Conservative 0; Mismatches 1; Indels 1027 GAGCTTGAAGGAA 1039 Query Match Matches à

13 GAGCTCGAAGGAA 1 g RESULT 923 ABC25843/c ID ABC25843 standard; DNA; 13 ABC25843;

20-FEB-2002

Oligonucleotide SEQ ID NO 25860 for detecting SNP TSC0006595. (first entry)

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; ບ Piepenbrock Olek A,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, : designed to detect single-nucleotide polymorphisms and cytosine designed to detect methylation status.

Claim 1; SEQ ID NO 25860; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, artdiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073

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represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fitp.wipo.int/pub/published_pot_sequences
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                                                                                                                          Score 11.4; DB 1; Length 13;
Pred, No. 4.2e+02;
0; Mismatches 1; Indels
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                                                                                                                                                                                                940 TTCATTGGTTTAA 952
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RESULT 924

ABC79822 standard; DNA; 13 ABC79822 ID ABC

ABC79822;

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(first entry) 21-FEB-2002

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Oligonuclectide SEQ ID NO 79839 for detecting SNP TSC0020268.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonuclectides, useful for diagnosis and cell typing, is designed to detect single-nuclectide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 79839; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cancer also used for advanced metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABE99999, ABF00010-ABE99999, ABF00010-ABE99999, ABF00010-ABE99999, ABF00010-ABE99999, ABF00010-ABE9003 and ABI00010-ABE8003 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

ö 0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; tive 0; Mismatches 1; Indels Best Local Similarity 92.3 Matches 12, Conservative Query Match

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1017 AAAAGAGGGGAG 1029

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

WO200177384-A2

18-OCT-2001.

Homo sapiens

13

ATAAGAGGGGGAG

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABF00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide SEQ ID NO 81731 for detecting SNP TSC020677.
                                                                                                                                    Oligonucleotide SEQ ID NO 5550 for detecting SNP TSC0001842.
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                                 ABC05559 standard; DNA; 13
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RESULT 925
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                                                                                                                                                                                                                          (EPIG-) EPIGENOMICS AG
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC099889, ABF00010-ABF89889, ABF00010-ABF89899, ABF00010-ABF89899, ABF00010-ABF89899 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequence
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically prereated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC091999, ABF00010-ABE99999, ABH00010-ABH99999 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                   Berlin K;
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                                                                 Piepenbrock C,
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ABC46382;

ABC46382 ID ABC RESULT

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99899, ABF00010-ABE99899, ABH00010-ABE99989 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                              Oligonucleotide SEQ ID NO 35614 for detecting SNP TSC0011256.
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Best Local Similarity 92.33,
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ABC35597 standard; DNA; 13
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Sequence 13 BP; 3 A; 8 C; 0 G; 2 T; 0 U; 0 Other;
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Matches 12; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory,
                                                                                                                                                                                  This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WFPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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                                          Set of oligonuclectides, useful for diagnosis and cell typing, idesigned to detect single-nuclectide polymorphisms and cytosine methylation status.
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                                                                                                                                                Claim 1; SEQ ID NO 60893; 29pp + Sequence Listing; German.
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Best Local Similarity 92.3%;
Matches 12; Conservative
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Query Match

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ABF63887 standard; DNA; 13

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99899, ABH00010-ABF99899 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at fitte.wipo.int/pub/published_pct_sequences
SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                 Oligonucleotide SEQ ID NO 163884 for detecting SNP TSC0041158
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Query Match 0.5%; Score 11.4; DB 1; Length 13; Best Local Similarity 92.3%; Pred. No. 4.2e+02; Matches 12; Conservative 0; Mismatches 1; Indels

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                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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            Oligonucleotide SEQ ID NO 189340 for detecting SNP TSC0046583.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and merabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo int/pub/published_pct_sequences
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                                                                                         Piepenbrock C,
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) eligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The eligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
Claim 1; SEQ ID NO 5549; 29pp + Sequence Listing; German
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Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 U; 0 Other;

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ABF25379 standard; DNA; 13 BP (first entry) 21-FEB-2002 ABF25379; RESULT 940 ABF25379

Oligonucleotide SEQ ID NO 125376 for detecting SNP TSC0031340.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Piepenbrock C, olek A,

WPI; 2001-657177/75.

Berlin K;

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 125376; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, oligomers are also used for detecting call type differentiation. ABC00010 oligomers are also used for detecting call type differentiation. ABC00010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

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                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                     Length 13;
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                                                  Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 U; 0 Other;
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                         Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                Oligonucleotide SEQ ID NO 146113 for detecting SNP TSC0036805.
                                                                                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 146113; 29pp + Sequence Listing; German.
                    ABF46116 standard; DNA; 13 BP.
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                                                            (first entry)
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RESULT 942
ABF46116
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Berlin K;

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a central nervous system, cardiovaecular and metabolic disorders. The oligoners are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF99989 and ABI00010-ABF82073 targeresont the oligoners described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at Gaps · 0 Match 0.5%; Score 11.4; DB 1; Length 13; Local Similarity 92.3%; Pred. No. 4.2e+02; es 12; Conservative 0; Mismatches 1; Indels Sequence 13 BP; 6 A; 0 C; 2 G; 5 T; 0 U; 0 Other; ftp.wipo.int/pub/published_pct sequences Query Match Matches

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ABF56566 standard; DNA; 13 BP. (first entry) 21-FEB-2002 ABF56566;

Oligonucleotide SEQ ID NO 156563 for detecting SNP TSC0039474

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer;

ö This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but fip.wipo.int/pub/published_pct_sequence central nervous system; gastrointestinal; respiratory; immune; metabolic. Gaps . 13 Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status. .; 0 0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; Live 0; Mismatches 1; Indels Claim 1; SEQ ID NO 156563; 29pp + Sequence Listing; German. Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other; Berlin K; 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173. 12; Conservative Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS AG WPI; 2001-657177/75. WO200177384-A2 Homo sapiens 18-OCT-2001 Query Match Best Local S Matches

854 AGAATGTTAAGGG 866 à

1 AGAATATTAAGGG 13

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Oligonucleotide SEQ ID NO 54471 for detecting SNP TSC0014932. (first entry) 21-FEB-2002

ВP.

ABC54454 standard; DNA; 13

RESULT 944

ABC54454

ABC54454;

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2. 18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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Oligonucleotide SEQ ID NO 79840 for detecting SNP TSC0020268. BP. ABC79823 standard; DNA; 13 (first entry) 21-FEB-2002 ABC79823; RESULT 94 ABC79823/

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Berlin Piepenbrock C, olek A,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.

Claim 1; SEQ ID NO 79840; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP)

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and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABE9989, ABF00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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SNP; single nuclectide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 123787 for detecting SNP TSC0030950.

ВЪ.

ABF23790 standard; DNA; 13

21-FEB-2002 (first entry)

Gaps ,

ABF23790;

Homo sapiens

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IBC00713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 123787; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Seguence 13 BP; 1 A; 1 C; 8 G; 3 T; 0 U; 0 Other;

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; Live 0; Mismatches 1; Indels
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                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 135934 for detecting SNP TSC0033944.
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ABH15265 standard; DNA; 13 BP 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173. 06-APR-2001; 2001WO-IB000713 07-APR-2000; 2000DE-01019173 Ouery Match Best Local Similarity 92.3%; 853 GAGAATGTTAAGG 865 22-FEB-2002 (first entry) 1 GAGAATGTAAAGG 13 12; Conservative Piepenbrock C, Piepenbrock C, (EPIG-) EPIGENOMICS AG. (EPIG-) EPIGENOMICS AG WPI; 2001-657177/75 WPI; 2001-657177/75 WO200177384-A2 Homo sapiens. 18-OCT-2001. 18-OCT-2001. ABH15265; olek A, olek A, 950 RESULT 95 ABH15265/ ò Ω

Berlin K;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pot_sequences
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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                 Claim 1; SEQ ID NO 215242; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 215241; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.4; DB 1;
Pred. No. 4.2e+02;
0; Mismatches 1;
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-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIFO at fitted specification, but ftp.wipo.int/pub/published_pot_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 oet or oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide SEQ ID NO 36061 for detecting SNP TSC0011348.
                                                                                                                                                                                                            Query Match 0.5%; Score 11.4; DB 1; Length 13; Best Local Similarity 92.3%; Pred. No. 4.2e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 36061; 29pp + Sequence Listing; German.
                                                                                                                                                          Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        952
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
SKCCCCCCCCCCKBKHHKKHKHKHKHKHKHKBKBKSKKKHMKH
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Oligonucleotide SEQ ID NO 135933 for detecting SNP TSC0033944.
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                                                      (first entry)
                                                      21-FEB-2002
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ABF35936
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849 GATTGAGAATGTT 861 12; Conservative

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Matches

Ouery Match 0.5%; Score 11.4; DB 1; Length 13; Best Local Similarity 92.3%; Pred. No. 4.2e+02;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABH0010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo int/pub/published_pct_sequences SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Gaps 9 Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status. ò Oligonucleotide SEQ ID NO 64535 for detecting SNP TSC0017021. 0.5%; Score 11.4; DB 1; Length 13; 32.3%; Pred. No. 4.2e+02; ve 0; Mismatches 1; Indels Claim 1; SEQ ID NO 64535; 29pp + Sequence Listing; German. Seguence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other; Berlin K; BP. 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173. larity 92.3%; Conservative 992 TIGITIGIGGGAA 1004 ABC64518 standard; DNA; 13 ABF35936 standard; DNA; 13 (first entry) 13 rrerrreadegaa 13 Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS AG WPI; 2001-657177/75. Local Similarity es 12; Conserv WO200177384-A2. Homo sapiens. 21-FEB-2002 18-OCT-2001 Query Match Best Loca Matches RESULT 954 ABC64518 d 8 d

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pot_sequences
                                                                                                                                                                                                                         Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 136145; 29pp + Sequence Listing; German.
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                                                                                                              Berlin
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                                                                                                           Piepenbrock C,
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                                                                                                                                                                  WPI; 2001-657177/75
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                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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ABF36148 standard; DNA; 13
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les 12, Conservative
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SNP, single nucleotide polymorphism, human; diagnosis, PNA; cancer, CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 143691 for detecting SNP TSC0036083.
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ABF36148/

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Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cancertal inservous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989 and ABI00010-ABI82073. represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at ö This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genemic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99899, ABH0010-ABF99899 and ABI0010-ABI82073 are seent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Gaps Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status. ; 0 Oligonucleotide SEQ ID NO 195982 for detecting SNP TSC0048212. Match 0.5%; Score 11.4; DB 1; Length 13; Local Similarity 92.3%; Pred. No. 4.2e+02; les 12; Conservative 0; Mismatches 1; Indels Claim 1; SEQ ID NO 195982; 29pp + Sequence Listing; German. Sequence 13 BP; 1 A; 0 C; 8 G; 4 T; 0 U; 0 Other; Berlin K; ABF95985 standard; DNA; 13 BP. 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173 1251 CCCCATCCCCAC 1263 (first entry) CACCATCCCCAAC 1 Piepenbrock C, (EPIG-) EPIGENOMICS AG WPI; 2001-657177/75

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                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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designed to detect single-nucleotide polymorphisms and cytosine
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Match 0.5%; Score 11.4; DB 1; Length 13; Local Similarity 92.3%; Pred. No. 4.2e+02; es 12; Conservative 0; Mismatches 1; Indels
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Best Local Similarity 92.33,
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ABF56567 standard; DNA; 13
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RESULT 959

ABH07888;

ABH07888

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, azdiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell typing, i debigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 264823; 29pp + Sequence Listing; German.
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Best Local Similarity 92.38
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Homo sapiens.
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                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                Oligonucleotide SEQ ID NO 207865 for detecting SNP TSC0050831.
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Best Local Similarity 92.39
Marches 12, Conservative
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960 RESULT 960 ABH64846/c

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WPI; 2001-657177/75

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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. 0 0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; ative 0; Mismatches 1; Indels Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 U; 0 Other; 12; Conservative Local Similarity Query Match Matches

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ABF68290/c

ABF68290/c

ID ABF68290;

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AC ABF68290;

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DT 22-FBB-2002 (first entry)

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DY Single nucleotide polymous peptide nucleic acid; cytosin who central nervous system; gastr.

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DHOMO Sapiens.

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DHOMO Sapiens.

XX
DO - APR-2000; 2000DB-01019173.

XX
CAPR-2001; 2001WO-IB000713.

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CAPR-2000; 2000DB-01019173.

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CAPR-2000; 2000B-0101777.

XX
CAPR-200

BP.

Oligonucleotide SEQ ID NO 168287 for detecting SNP TSC0042090

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

Berlin K;

Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 168287; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretracted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a

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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers a slso used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                          Seguence 13 BP; 2 A; 1 C; 8 G; 2 T; 0 U; 0 Other;
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Best Local Similarity 92.3
Matches 12; Conservative
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status. 쏬 Berlin 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173. Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS AG. WPI; 2001-657177/75 WO200177384-A2. Homo sapiens 18-OCT-2001.

Claim 1; SEQ ID NO 146126; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PMA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE09989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; Sequence 13 BP; 2 A; 9 C; 0 G; 2 T; 0 U; 0 Other; Query Match Best Local Similarity

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting call type differentiation. ABC00010-ABC09989, ABF00010-ABF99899, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                       Oligonucleotide SEQ ID NO 93479 for detecting SNP TSC0023358.
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0.5%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 4.2e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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  Mismatches
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    12; Conservative
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Matches

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RESULT 964

ABH59544

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Query Match

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ABC93462

ABC93462 ID ABC9 XX AC ABC9

RESULT 965

methylation status

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06-APR-2001; 2001WO-IB000713.
           07-APR-2000; 2000DE-01019173
                          Piepenbrock C,
                   (EPIG-) EPIGENOMICS AG
                                  WPI; 2001-657177/75
                           olek A,
                                           Set of
X#X#X#X#X#X#X####X
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at 0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; cive 0; Mismatches 1; Indels 0; oligonucleotides, useful for diagnosis and cell typing, ied to detect single-nucleotide polymorphisms and cytosine Claim 1; SEQ ID NO 111603; 29pp + Sequence Listing; German. Sequence 13 BP; 1 A; 0 C; 6 G; 6 T; 0 U; 0 Other; TIGITIGIGGAA 1004 Query Match Best Local Similarity 92.3 Marches 12, Conservative methylation status. 992 à

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ABC40096 standard; DNA; 13 ABC40096; RESULT 967 ABC40096/ PRACE X PRACE

BP

(first entry) 21-FEB-2002

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; 88; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Oligonucleotide SEQ ID NO 40113 for detecting SNP TSC0012202.

Homo

WO200177384-A2

.8-OCT-2001.

06-APR-2001; 2001WO-IB000713. 37-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Olek A, Piepenbrock C,

WPI; 2001-657177/75

Berlin K;

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic form trom WIPO at
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                                        Claim 1; SEQ ID NO 40113; 29pp + Sequence Listing; German
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Berlin K;

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 116415 for detecting SNP TSC0029144. Homo sapiens

ВЪ

ABF16418 standard; DNA; 13

RESULT 968 ABF16418 (first entry)

21-FEB-2002

Gaps

ABF16418;

WO200177384-A2

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; Piepenbrock C, olek A,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1, SEQ ID NO 116415, 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE03989, ABE00010-ABE9989, ABE00010-ABE9989, ABE00010-ABE9989, ABE00010-ABE9989 and ABI00010-ABE90073 represent the oligomers described in the invention. NOTE: The sequence

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH0010-ABF99989 and ABI00010-ABF8073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                              ABH59545 standard; DNA; 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                      0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; ative 0; Mismatches 1; Indels
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                                                                                         Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
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Homo sapiens.

18-OCT-2001

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21-FEB-2002

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RESULT 969 ABF32399/c

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Query Match

Local Best Loca Matches ö

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPD at
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                                                                                                                                    ligonuclectides, useful for diagnosis and cell typing, is to detect single-nuclectide polymorphisms and cytosine
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                                                 Berlin K;
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  (EPIG-) EPIGENOMICS AG.
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                                                                                                                                                                                        methylation status.
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                                               Olek A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for dececting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99899, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
peptide nucleic acid, cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 40114; 29pp + Sequence Listing; German.
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Pred. No. 4.2e+02;
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Local Similarity 92.3%;
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Query Match

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status; in chemically pretreated genomic DNA. The cligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastroinestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic form part from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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ftp.wipo.int/pub/published_pct_sequences
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Length 13;
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92.3%; Pred. No. 4.2e+02;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Matches 12; Conservative
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                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                      Oligonucleotide SEQ ID NO 111604 for detecting SNP TSC0027869.
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ABF11607 standard; DNA; 13
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               Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                             Claim 1; SEQ ID NO 111604; 29pp + Sequence Listing; German.
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oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at flow int/pub/published_pot_sequences
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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       Oligonucleotide SEQ ID NO 81732 for detecting SNP TSC0020677.
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ABF12076 standard; DNA; 13 BP.
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Best Local Similarity 92.3
Matches 12, Conservative
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ABF12076/c
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                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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1258 CCCAACCCCTTC 1270
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Best Local Similarity
Matches 12; Conserv
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RESULT 982 ABC81715

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Claim 1; SEQ ID NO 115726; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 tapeseen the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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Local Similarity 92.3%; Pred. No. 4.2e+02;
Hes 12; Conservative 0; Mismatches 1; Indels
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                                                                                                                                                                                               Berlin K;
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                                      07-APR-2000; 2000DE-01019173
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                                                                                                                  (EPIG-) EPIGENOMICS AG.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genemic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cantral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Best Local Similarity 92.3
Matches 12, Conservative
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BP.

ABF94304 standard; DNA; 13

(first entry)

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ABF94304;

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RESULT 98'
ABF94304/
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                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                     Query Match 0.5%; Score 11.4; DB 1; Length 13; Best Local Similarity 92.3%; Pred. No. 4.2e+02; Matches 12; Conservative 0; Mismatches 1; Indels
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ftp.wipo.int/pub/published_pct_sequences
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                         Oligonucleotide SEQ ID NO 194301 for detecting SNP TSC0047795.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and merabolic disorders. The cligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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Piepenbrock C,
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                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 112074 for detecting SNP TSC0027971.
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                                                                                                                   ABF12077 standard; DNA; 13
805 AACTGTAAGAAAA 817
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18-OCT-2001

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                              Oligonucleotide SEQ ID NO 37674 for detecting SNP TSC0011716.
                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 37674; 29pp + Sequence Listing; German.
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          20-FEB-2002 (first entry)
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                                                                                                                                                                                                      (EPIG-) EPIGENOMICS AG
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                                                                                             Homo sapiens.
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Berlin K;

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form par of the printed specification, but was obtained in electronic format from WIPO at ö 0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; tive 0; Mismatches 1; Indels Seguence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 U; 0 Other; 977 CCAAGCTCTACTC 989 Query Match 0.5 Best Local Similarity 92.3 Matches 12; Conservative

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ABF15307 standard; DNA; 13 BP. (first entry) 21-FEB-2002 ABF15307; RESULT 994 ABF15307

Oligonucleotide SEQ ID NO 115304 for detecting SNP TSC0028911.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; 88; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                           German.
                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 115304; 29pp + Sequence Listing;
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                                 06-APR-2001; 2001WO-IB000713.
                                                                       07-APR-2000; 2000DE-01019173
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                                                                                                          (EPIG-) EPIGENOMICS AG
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. . 13 Set of oligonucleotides, useful for diagnosis and cell typing, × Berlin 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173 Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS WPI; 2001-657177/75. WO200177384-A2. Homo sapiens

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically prefeated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99899 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                        Claim 1; SEQ ID NO 195981; 29pp + Sequence Listing; German.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC09989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073
                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 204036 for detecting SNP TSC0050065.
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represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, by was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                           Query Match 0.5%; Score 11.4; DB 1; Length 13; Best Local Similarity 92.3%; Pred. No. 4.2e+02; Matches 12; Conservative 0; Mismatches 1; Indels
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                                                                                            Seguence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 U; 0 Other;
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nes 12; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABF9989, and ABI00010-ABF82073 data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                set or oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                               Oligonucleotide SEQ ID NO 131354 for detecting SNP TSC0032783.
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                               ABF31357 standard; DNA; 13 BP.
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                                                             ABF31357;
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiagnosis and metabolic disorders. The oligomers are also used for detecting call type differentiation. ABC00010-ABC99889, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                        (EPIG-) EPIGENOMICS AG.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                     Oligonucleotide SEQ ID NO 22081 for detecting SNP TSC0004393.
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    ABC22064 standard; DNA; 13
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                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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BP; 3 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                        Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                           Claim 1; SEQ ID NO 35613; 29pp + Sequence Listing; German.
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ABF15728 standard; DNA; 13
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tes 12; Conserv
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) cligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABH82073 data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE099989, ABR00010-ABE99989, ABR0010-ABE99989, ABR0010-ABE99899, ABR0010-ABE99898, ABR0010-ABE9988, ABR0010-ABE99898, ABR0010-ABE99898, ABR0010-ABE9988, ABR00
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but fire.wipo.int/pub/published_pot_sequences
                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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designed to detect single-nucleotide polymorphisms and cytosine
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1164 CTGTCCCAACTTT 1176
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic discorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABF99889, ABF00010-ABF99899, ABF00010-ABF99899 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at
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                                                                                                                                                                                                                         Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 69002; 29pp + Sequence Listing; German
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABR0010-ABH99989 and ABI00010-ABI82073 the represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                   Oligonucleotide SEQ ID NO 163883 for detecting SNP TSC0041158.
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ftp.wipo.int/pub/published_pct_sequences
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Query Match

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Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nuclectide polymorphisms and cytosine methylation status.

WPI; 2001-657177/75.

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18-OCT-2001

Homo sapiens

XBXBXXBXXBX

ABC68985;

RESULT 1011

ABC68985

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABM00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form par to f the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                          Claim 1; SEQ ID NO 70956; 29pp + Sequence Listing; German.
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Query Match
0.5%; Score 11.4; DB 1;
Best Local Similarity 92.3%; Pred. No. 4.2e+02;
Matches 12; Conservative 0; Mismatches 1; 994 GTTTGTGGGAAAT 1006 13 Grrrrrdddaaar 1 ò 셤

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Length 13;

ABF16419 standard; DNA; 13 BP. 21-FEB-2002 ABF16419; RESULT 1013 ABF16419/c

Oligonucleotide SEQ ID NO 116416 for detecting SNP TSC0029144. (first entry)

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Olek A, Piepenbrock C,

Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 116416; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABR00010-ABF99899 and ABI00010-ABF9989. represent the oligomers described in the invention, NOTE: The sequence data for this patent did not form part of the printed specification, but

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                                                                                                                                                                                                                                                Oligonucleotide SEQ ID NO 131846 for detecting SNP TSC0032915.
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                               Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
                                                   Query Match
Best Local Similarity 92.3%; Pred. No. 4.2e+02;
Matches 12; Conservative 0; Mismatches 1;
was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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ö This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The coligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABF99889, ABF00010-ABF99899, ABF00010-ABF82073 and ABI00010-ABF82073 data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequence ö 0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; tive 0; Mismatches 1; Indels Seguence 13 BP; 2 A; 5 C; 0 G; 6 T; 0 U; 0 Other; 1164 CTGTCCCAACTTT 1176 CTTTCCCAACTT 13 12; Conservative Best Local Similarity Matches 12; Conserv Query Match à 셤

Claim 1; SEQ ID NO 131846; 29pp + Sequence Listing; German.

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ABF68286;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF9989, ABH00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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central nervous system; gastrointestinal; respiratory; immune; metabolic
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                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                        ABF68286 standard; DNA; 13 BP
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Gaps

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(EPIG-) EPIGENOMICS

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

ABF94305;

1016

RESULT 10 ABF94305

Matches

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18-OCT-2001

RESULT_10
RESULT

Berlin K;

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Piepenbrock

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form art of the printed specification, but was obtained in electronic format from WIPO at
                                                                                            onucleotides, useful for diagnosis and cell typing, idetect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 69001; 29pp + Sequence Listing; German.
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                                                                                                 of oligonucleotides,
WPI; 2001-657177/75.
                                                                                                                                               designed to detect amethylation status.
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Score 11.4; DB 1; Length 13; Pred. No. 4.2e+02; 0; Mismatches 1; Indels
       Match 0.5%;
Local Similarity 92.3%;
                                                              1137 CTCCAGCTCCACC 1149
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       Query Match
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ABC22061 standard; DNA; 13 BP. (first entry) 20-FEB-2002 ABC22061; RESULT 1018

Oligonucleotide SEQ ID NO 22078 for detecting SNP TSC0004393.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

WO200177384-A2. Homo sapiens.

18-OCT-2001

07-APR-2000; 2000DE-01019173. 06-APR-2001; 2001WO-IB000713

(EPIG-) EPIGENOMICS AG

Berlin K; Piepenbrock C, WPI; 2001-657177/75. olek A,

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

claim 1; SEQ ID NO 22078; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF0010-ABF9989, AH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at 88888888888888

Seguence 13 BP; 4 A; 7 C; 0 G; 2 T; 0 U; 0 Other;

Gaps ö 0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; ive 0; Mismatches 1; Indels Query Match Best Local Similarity 92.3³ Matches 12, Conservative

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1146 CACCTATACCCCC 1158 CACATATACCCCC 13 à ద

Oligonucleotide SEQ ID NO 34861 for detecting SNP TSC0011080. ABC34844 standard; DNA; 13 BP. (first entry) 20-FEB-2002 ABC34844; RESULT 1019 ABC34844/c

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Gaps

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173. (EPIG-) EPIGENOMICS AG.

WPI; 2001-657177/75.

Olek A, Piepenbrock C,

Berlin K;

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 34861; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) cligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The coligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF0010-ABF9989, ABH0010-ABH99999 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 0 A; 1 C; 10 G; 2 T; 0 U; 0 Other;

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22-FEB-2002
                                                                     21-FEB-2002
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               ABF15306;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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               Length 13;
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                                                                     1; Indels
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         Score 11.4; DB 1;
Pred. No. 4.2e+02;
0; Mismatches 1;
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ABF15306/c
ID ABF15306 standard; DNA; 13 BP.
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            92.3%;
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Best Local Similarity 92.5.
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Best Local Similarity 92.38
Matches 12, Conservative
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ID ABC642
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                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                             Oligonucleotide SEQ ID NO 115303 for detecting SNP TSC0028911.
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(first entry)
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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 168288; 29pp + Sequence Listing; German.

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                                                                                                                                                                                   Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 168284; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 13 BP; 3 A; 8 C; 0 G; 2 T; 0 U; 0 Other;
                                                                                                                                Berlin K;
                                          06-APR-2001; 2001WO-IB000713.
                                                                     07-APR-2000; 2000DE-01019173.
                                                                                                                               Olek A, Piepenbrock C,
                                                                                                 (EPIG-) EPIGENOMICS AG
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            18-OCT-2001
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but fire wipo int/pub/published_pot_sequences

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Gaps

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Query Match

0.5%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 4.2e+02;
Matches 12; Conservative 0; Mismatches 1; Indels

1091 TCACCCCACCT 1103

1 TCACCCGACCCT 13

ABF73358 standard; DNA; 13 BP.

(first entry)

22-FEB-2002 ABF73358;

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Gaps

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. Match 0.5%; Score 11.4; DB 1; Length 13; Local Similarity 92.3%; Pred. No. 4.2e+02; es 12; Conservative 0; Mismatches 1; Indels

Query Match

1091 TCACCCCCCCCT 1103

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1 TCACCCCAACCCT 13

Sequence 13 BP; 2 A; 8 C; 1 G; 2 T; 0 U; 0 Other;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PMA) oligomers for detecting single nucleotide polymorphisms (SMP) and cytosine methylation status in chemically pretreated genomic DMA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010
                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                       Oligonucleotide SEQ ID NO 173355 for detecting SNP TSC0043189.
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                                                                                                                                                                                                                                                                              Homo sapiens
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 168288 for detecting SNP TSC0042090.

BP.

ABF68291 standard; DNA; 13

RESULT 1023 ABF68291 ABF68291;

22-FEB-2002 (first entry)

Berlin K;

Olek A, Piepenbrock C,

WPI; 2001-657177/75.

(EPIG-) EPIGENOMICS AG

06-APR-2001; 2001WO-IB000713 07-APR-2000; 2000DE-01019173.

WO200177384-A2. Homo sapiens.

18-OCT-2001

ABH65695 standard; DNA; 13

RESULT 1026

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, the ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                               Query Match 0.5%; Score 11.4; DB 1; Length 13; Best Local Similarity 92.3%; Pred. No. 4.2e+02; Matches 12; Conservative 0; Mismatches 1; Indels
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 ABC9989, ABF00010-ABF9989, ABH0010-ABH9999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but firewipo.int/pub/published_pct_sequences
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....hes 12; Conservative
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Piepenbrock C,
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Sequence 13 BP; 2 A; 10 C; 1 G; 0 T; 0 U; 0 Other;

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Gaps

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABH99989 and ABI00010-ABH82073 tapesent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99899 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 34862 for detecting SNP TSC0011080.
                                                                                                                                                                                                                                                                                                                        0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02;
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                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                0.5%; Score 11.4; DB 1; Length 13; ilarity 92.3%; Pred. No. 4.2e+02; Conservative 0; Mismatches 1; Indels
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Query Match
Best Local Similarity
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Matches
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RESULT 1032

Berlin K;

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06-APR-2001; 2001WO-IB000713.
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                                                                                                                           (EPIG-) EPIGENOMICS AG
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     Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                      Oligonucleotide SEQ ID NO 123788 for detecting SNP TSC0030950.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 123788; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              was obtained in electronic format from WI
ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                              Berlin K;
               BP.
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              ABF23791 standard; DNA; 13
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ABF36153
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent din ot form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                        Claim 1; SEQ ID NO 136150; 29pp + Sequence Listing; German.
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Matches 12; Conservative
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WPI; 2001-657177/75.
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Sequence 13 BP; 4 A; 8 C; 0 G; 1 T; 0 U; 0 Other;
  WPI; 2001-657177/75
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) eligemers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The coligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC00010-ABE99999, ABF00010-ABH99999 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status. Claim 1; SEQ ID NO 143692; 29pp + Sequence Listing; German.

Score 11.4; DB 1; Length 13; Pred. No. 4.2e+02; 0; Mismatches 1; Indels 0.5%; 1251 CCCCATCCCCAAC 1263 Query Match
Best Local Similarity 92.35 1 CACCATCCCCAAC 13

RESULT 1035 ABF73359/c

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BP

Oligonucleotide SEQ ID NO 173356 for detecting SNP TSC0043189. ABF73359 standard; DNA; 13 (first entry) 22-FEB-2002 ABF73359;

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2. 18-OCT-2001 06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; Piepenbrock C, WPI; 2001-657177/75 olek A,

Claim 1; SEQ ID NO 173356; 29pp + Sequence Listing; German.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PMA) oligomers for detecting single nuclectide polymorphisms (SMP) and cytosine methylation status in chemically pretreated genomic DMA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a

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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABC00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fig. wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                        0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                              Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                       991 ATTGTTTGTGGGA 1003
                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 92.33
Matches 12; Conservative
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BP

ABF83677 standard; DNA; 13

1036

RESULT 10

(first entry)

22-FEB-2002

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Gaps

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ABF83677;

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 183674 for detecting SNP TSC0045363. 06-APR-2001; 2001WO-IB000713 07-APR-2000; 2000DE-01019173 (EPIG-) EPIGENOMICS AG WO200177384-A2 Homo sapiens. 18-OCT-2001.

Berlin K; Olek A, Piepenbrock C, WPI; 2001-657177/75 Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 183674; 29pp + Sequence Listing; German

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically prereated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire wipo.int/pub/published_pot_sequences

Sequence 13 BP; 5 A; 6 C; 0 G; 2 T; 0 U; 0 Other;

0.5%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 4.2e+02; Query Match Best Local Similarity

(first entry)

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; pebtide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                      Oligonucleotide SEQ ID NO 264824 for detecting SNP TSC0064191.
                                                                                                                               WO200177384-A2.
                                                                                                      Homo sapiens.
22-FEB-2002
                                                                                                                                                       18-OCT-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, aradiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99899, ABH00010-ABF99899 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form mar tof the printed specification, but was obtained in electronic format from WIPO at.
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                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         oligonucleotides, useful for diagnosis and cell typing, is to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                Oligonucleotide SEQ ID NO 236169 for detecting SNP TSC0057642.
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  Indels
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  Mismatches
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                                                                                                         192/c
ABH36192 standard; DNA; 13
                            1262 ACCCCCTTCAGAA 1274
                                                                                                                                                                       (first entry)
                                            1 ACCCCTTCAAAA 13
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    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                        Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                               (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Set of oligonucleot designed to detect methylation status.
                                                                                                                                                                                                                                                                                                        WO200177384-A2
                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                       22-FEB-2002
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  12;
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                                                                                                                                             ABH36192;
                                                                                           RESULT 1037
  Matches
                                                                                                         ABH36192,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligomer; specificity; pseudonuclectide; anthraquinone; in vitro; in vivo; hybridisation; antisense therapy; stability; diagnosis; ss
                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 264824; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13 BP; 3 A; 8 C; 0 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pseudonucleotide containing control oligomer.
                                                                                                                                                     Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
06-APR-2001; 2001WO-IB000713
                                               07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1254 CATCCCCAACCCC 1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ42800/c
ID AAQ42800 standard; DNA; 14
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                                                                                                                                                   Olek A, Piepenbrock C,
                                                                                                   (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                       WPI; 2001-657177/75.
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BP.

ABH64847 standard; DNA; 13

RESULT 1038 ABH64847

ABH64847;

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The sequences given in AAQ61990-2001 are oligonucleotides which contain G4 or G3 stretches and which may be used for inhibiting replication of herpes simplex virus (HSV), activity of HIV, human cytomegalovirus or influenza virus, or for treating inflammatory and neurological disorders caused by phospholipase A2 activity in cases of hyper-proliferation, malignancy, cardiovascular disease and snake bite. Oligonucleotides such as these, may be used for inhibiting division of malignant cells by modualting telomere length, which may also retard aging. (Updated on 25-MAR-2003 to correct PN field.)
           * modified oligo-nucleotide contg guanine quartet - inhibits activity
viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
chromosomes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New modified oligo-nucleotide contg guanine quartet - inhibits activity of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            human cytomegalovirus; influenza virus; inflammation;
neuvological disorders; phospholipase A2 activity; hyperproliferation;
malignancy; cardiovascular disease; snake bite; malignancy;
telonere length; retard; aging; ss.
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/*tag= a
/note= "Phosphorothionate intersugar linkages"

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Inhibition; replication; herpes simplex virus; HSV; HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIV replication inhibiting oligomer, ISIS no 5667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chiang M,
                                                                                                                                                                                                                                                     Sequence 14 BP; 0 A; 0 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bennett CF, Chian
ttt JR, Imbach JL;
                                                                       Disclosure; Page 107; 144pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure, Page 23, 144pp, English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hanecak RC, Anderson KP, Bennett
Ecker DJ, Vickers TA, Wyatt JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ61915 standard; DNA; 14 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                               13 ACCCCAACCCCAA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1994-135613/16.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-SEP-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9408053-A1
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04-NOV-1994
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                                                                                                                                                                                                                        The sequences given in AAQ42793-802 are oligomers which contain pseudomucleotides which contain anthraquinone. These oligomers were tested for stability in vitro and in vivo, and specificity of hybridisation to complementary DNA and RNA. Hybridisation was increased with respect to DNA and RNA complement in almost all cases. The oligomers which contain two anthraquinone modifications generally show cumulatively enhanced stability as compared to those with only one such residue. These oligomers are useful for therapeutic, esp. antisense therapy, diagnostic
                                                                                                                                                Modified oligo:nucleotide(s) conjugates to anthraquinone - useful as anti-sense agents for treating and diagnosing diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inhibition; replication; herpes simplex virus; HSV; HIV; retard; human cytomegalovirus; influenza virus; inflammation; telomera length; neurological disorders; phospholipase A2 activity; hyperproliferation; malignancy; cardiovascular disease; snake bite; malignancy; aging; ss.
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/note= "Phosphorothionate intersugar linkages"
                                                                                                                                                                                                                                                                                                                                                                                                           0.5%; Score 11.4; DB 1; Length 14; 92.3%; Pred. No. 5.2e+02; tive 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                               Sequence 14 BP; 0 A; 7 C; 0 G; 7 T; 0 U; 0 Other;
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att JR, Imbach JL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Guanine quartet containing oligomer, #7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Anderson KP, Bennett
Vickers TA, Wyatt JR,
                                                                                                                                                                                              Disclosure, Table 1; 6pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВЪ
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90US-00482941
                             90US-00482941
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ61996 standard; DNA; 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                   and research applications
                                                                                                                                                                                                                                                                                                                                                                                                                                             12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAAAAGAGAGGG 1
                                                          (GILE-) GILEAD SCI INC
                                                                                       Matteucci M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1994-135613/16
                                                                                                                     WPI; 1993-181844/22
                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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                             20-FEB-1990;
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04-NOV-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
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                                                                                       Lin KY,
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AAQ61996/c
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Gaps

Page 491

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The sequences given in AAQ61913-16 are oligonuclectides which contain a def stretch and which may be used for inhibiting replication of human immunodeficiency virus (HIV). Oligonuclectides such as these may also be used for inhibiting activity of HSV, human cyromegalovirus or influenza virus, or for treating inflammatory and neurological disorders caused by phospholipase A2 activity in cases of hyper-proliferation, malignancy, cardiovascular disease and make bite. They may also be used for inhibiting division of malignant cells by modualting telomere length, which may also retard aging. (Updated on 25-MAR-2003 to correct FN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequences given in AAQ61825-50 and AAQ61886-906 are oligonucleotides which contain a G4 or two G3 stretches and which may be used for inhibiting replication of herpes simplex virus (HSV). Oligonucleotides such as these may also be used for inhibiting activity of HIV, human cytomegalovirus or influenza virus, or for treating inflammatory and neurological disorders caused by phospholipase A2 activity in cases of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New modified oligo-nucleotide contg guanine quartet - inhibits activity of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length of chromosomes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Inhibition; replication; herpes simplex virus; HSV; HIV; human cytomegalovirus; influenza virus; influenzamation; neurological disorders; phospholipes A2 activity; hyperproliferation; malignancy; cardiovascular disease; snake bite; malignancy;
                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
Ecker DJ, Vickers TA, Wyatt JR, Imbach JL;
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/note= "Phosphorothionate intersugar linkages"
                                                                                                                                                                                                                                   Query Match 0.5%; Score 11.4; DB 1; Length 14; Best Local Similarity 92.3%; Pred. No. 5.2e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HSV replication inhibiting oligomer, ISIS no 5675.
                                                                                                                                                                                                    Sequence 14 BP; 0 A; 0 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 19; 144pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              telomere length; retard; aging; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                           ВР.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93WO-US009297.
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                                                                                                                                                                                                                                                                                                              1250 ACCCCATCCCCAA 1262
                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ61899 standard, DNA; 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
(first entry)
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/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
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misc_feature
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04-NOV-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ61899;
                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1042
AAQ61899/c
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hyperproliferation, malignancy, cardiovascular disease and snake bite. They may also be used for inhibiting division of malignant cells by modualting telomere length, which may also retard aging. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Transforming growth factor beta; TGF-beta; antisense; treatment; tumour; anglogenesis; breast tumour; neurofibroma; glioma; glioblastoma; carcinogenesis; carcinoma; oesophagus; oesophageal; gastric; gut; immunosuppression; oligonucleotide; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New transforming growth factor beta anti:sense oligo:nucleotide(s) treating immunosuppression, tumours, etc.
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                                                                                                                    0.5%; Score 11.4; DB 1; Length 14; 92.3%; Pred. No. 5.2e+02; tive 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                               TGF-beta gene phosphorothioate antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Schlingensiepen G, Brysch W, Schlingensiepen K,
Bogdahn U;
                                                                                      Sequence 14 BP; 0 A; 0 C; 8 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 6; Page 53; 74pp; English.
                                                                                                                                                                                                                                                                                                                       BP
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93EP-00107849.
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                                                                                                                                                                                              1250 ACCCCATCCCCAA 1262
                                                                                                                                                                                                                                                                                                                     AAQ78453 standard; DNA; 14
                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                   Query Match
Best Local Similarity 92.39
Matches 12, Conservative
                                                                                                                                                                                                                              13 ACCCCAACCCCAA 1
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Best Local Similarity
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13-MAY-1993;
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27-JUN-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                         AAQ78453;
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2003 to correct PN field.)
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AAQ67550
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AAQ67549'/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New peptide nucleic acid (PNA) oligomers are provided which (a) consist of naturally occurring nucleobases covalently bound to a polyamide backbone and (b) hybridise to the translation initiation AUG region, 5' untranslated region (3' UTR), splice junctions or coding sequence of a human immunodeficiency virus gene chosen from env. gag, pol, rev and tat. The PNAs can be used to target RNA and single stranded DNA (ssDNA) to produce antisense-type gene regulation moieties. They have utility as gene-targetted drugs for modulating HIV processes. Hence they can be used to treat AIDS and other viral infections. They have also useful in disagnestic applications and as research tools. PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which a first PNA strand binds with RNA or sbDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand the DNAs possess no significant charge and are water soluble, which facilitates cellular uptake. Further, since they contain amides of non-biological amino acide, they are biostable and resistent to enzymatic degradation by proteases. The present sequence of nucleobases) targetting HIV genes. (Updated on 25-MAR-
  ö
                                                                                                                                                                                                                                                                                                                                 /*tag= a tat least one (and preferably all) of the backbone subunits are composed of Nacetyl N-(2-aminoethyl)glycine peptide residues, the nucleobase being attached covalently to the acetyl group and the peptide linkage being formed by condensation of the glycine carboxy group of one residue with the amino group of the 2-aminoethyl moiety in the next residue."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligomer hybridisable to HIV sequence and contg. peptide nucleic acid sub:unit - binds in complementary manner to DNA and RNA, and useful for modulating HIV viral activity, e.g. in treating AIDS.
 Gaps
                                                                                                                                                                                                                                    Peptide nucleic acid; PNA; HIV; human immunodeficiency virus; AIDS; antiviral; antisense; triple helix; ss.
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  Indels
                                                                                                                                                                                                              Peptide nucleic acid oligomer targetting HIV gene
  1;
  Mismatches
                                                                                                                                                                                                                                                                                                        Location/Qualifiers
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                                                                                                                   AAQ97984 standard; DNA; 14 BP
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                      1143 CTCCACCTATACC 1155
                                                                                                                                                                      (revised)
(first entry)
                                       13 CTCCACATATACC 1
  Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1995-082179/11.
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misc_feature
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19-OCT-1995
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                                                                                                                                                                                                                                                                                Synthetic.
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AAQ97984/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            steroid; conjugate; oligonucleotide; diagnostic; hybridisation probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligo-nucleotide conjugates with poly:cyclic mols., esp. steroid(s) useful as nucleic acid hybridisation probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
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                                                Length 14;
                                                Query Match 0.5%; Score 11.4; DB 1; Length 1 Best Local Similarity 92.3%; Pred. No. 5.2e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 14 BP; 0 A; 6 C; 0 G; 8 T; 0 U; 0 Other;
Sequence 14 BP; 0 A; 0 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide conjugated to steroid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Col 19; 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                     AAQ67549 standard; DNA; 14 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92US-00902538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90US-00461884.
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                                                                                                                                                                 1250 ACCCCATCCCCAA 1262
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(first entry)
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                                                                                                                                                                                                               13 ACCCCAACCCCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (GILE-) GILEAD SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (revised)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-JUN-1992;
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13-MAR-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
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99WO-US006507 98US-0079678P

24-MAR-1999; 27-MAR-1998; (RIBO-) RIBOZYME PHARM INC.

Page 493

2 06:29:55 2004

Tue Mar

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The invention relates to a conjugate of an oligonucleotide and a rigid polycyclic molecule, preferably an amino-substituted steroid. The conjugate can be used for diagnostic purposes by detecting a nucleic acid sequence. It forms a more stable complex with complementary DNA sequences than the unconjugated oligonucleotide alone. The present sequence is one tased in the examples to test the hybridisation efficiency of a complementary oligonucleotide sequence (AAO67549) conjugated to an aminosteroid. (Updated on 25-WAR-2003 to correct PF field.)
                                                                steroid; conjugate; oligonucleotide; diagnostic; hybridisation probe; ss.
                                                                                                                                                                                                                                                                                                                                                          Oligo-nucleotide conjugates with poly:cyclic mols., esp. steroid(s) useful as nucleic acid hybridisation probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 14 BP; 8 A; 0 C; 6 G; 0 T; 0 U; 0 Other;
                                 Oligonucleotide complementary to test sequence
                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Col 19; 34pp; English.
                                                                                                                                                                                                                            90US-00461884.
                                                                                                                                                                                             92US-00902538.
(first entry)
                                                                                                                                                                                                                                                            (GILE-) GILEAD SCI INC
                                                                                                                                                                                                                                                                                                                            WPI; 1996-104845/11.
                                                                                                                                                                                                                            08-JAN-1990;
                                                                                                                                                                                             22-JUN-1992;
 13-MAR-1997
                                                                                                                               US5486603-A
                                                                                                                                                              23-JAN-1996
                                                                                               Synthetic
                                                                                                                                                                                                                                                                                             Buhr CA;
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Gaps . 0 Query Match

0.5%; Score 11.4; DB 1; Length 14;
Best Local Similarity 92.3%; Pred. No. 5.2e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 1017 AAAAGAGGGGAG 1029 1 AAAAGAGAGGAG 13 ઠે

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Human TIE-2 target site SEQ ID NO:2427. 1201/c AAA19201 standard; RNA; 14 BP. 19-JUN-2000 (first entry) AAA19201; RESULT 1047 AAA19201/c

Human, aryl hydrocarbon nuclear transport, ARNT, TIB-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhaad ribozyme; angiogenic factor; cytostatic; antidabetic; ophthalmologic; antiniflammatory, antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; necvascular glaucoma; myopic degeneration; pgoriasis; verucar audgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

Homo sapiens

07-OCT-1999

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The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl gene, an integrin subunit beta 3 gene, and AAA1167 and AAA11651 to AAA11622 represent ribozyme sequences for AAA19154 represent their corresponding target sequences; AAA19155 and AAA19155 to AAA19152 represent their corresponding target sequences; AAA19153 to AAA19150 and AAA19155 to AAA19155 to AAA19150 and AAA19155 to AAA19150 and AAA2168 represent their corresponding target sequences; AAA15150 to AAA2168 represent their corresponding target sequences; AAA21550 and AAA21550 to AAA2168 represent their corresponding target sequences; AAA21550 to AAA2168 represent their corresponding target sequences; AAA2342 represent their corresponding target sequences for integrin subunit beta 3, and AAA22476 to AAA23342 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23343 to AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, age related to treat cancer, diabetic retinopathy, age related to receipent august and decoration (ARWD), inflammation, and arthritis, as well as necovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, and other syndromes and diseases related to the levels of ARNI, Tie-2, integrin subunit alpha-6, or the levels of ARNI, Tie-2, integrin subunit alpha-6, or the levels of ARNI, tie-2, and other syndromes and diseases related to the levels of ARNI, Tie-2, integrin subunit alpha-6, or integrin
                                                                                                                                                                                                                                                                                             Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
                                                                                                                                                                            Coeshott C, Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 14 BP; 3 A; 7 C; 1 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                        Claim 56; Page 138; 305pp; English.
                                                                                                                                                                               Jarvis T,
                                                                                                                                                                               Roberts E,
                                                                                                                                                                                                                                      WPI; 1999-591315/50.
                                                                                                                                                                               Pavco PA,
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Gaps ö Query Match
0.5%; Score 11.4; DB 1; Length 14;
Best Local Similarity 92.3%; Pred. No. 5.2e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 1276 TGGGAGGACAGCG 1288

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769/c AAA06769 standard; DNA; 14 BP. AAA06769; AAA06769 BX&X8X&&&&&&&

14 TGGGAGACAGTG 2

d

(first entry)

05-JUN-2000

VEGF derived short oligonucleotide SEQ ID NO:78.

Human; vascular endothelial growth factor; VEGF; phosphorothioate; antisense oligonucleotide; inhibition; cytostatic; angiogenic; gene therapy; abnormal vascular permeability; cell proliferation; cell permeation; anglogenesis; neovascularisation; tumour cell growth; metastasis; ss.

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EP979869-A1

16-FEB-2000

Tue Mar

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Page 494
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The present invention describes oligomucleotides (I) of 10-15 residues corresponding to a part of a vascular endothelial growth factor (VEGF) comprising 1 of 6 sequences given in AAA06692 to AAA06697. AAA06698 to AAA06733 represent VEGF antisense oligomucleotides used in the exemplification of the present invention. The antisense oligomucleotides can contain phosphorcthicate linkages. Oligomucleotides from the present invention have cytostatic and angiogenic activities, and can be used in gene therapy. The oligomucleotides are useful for inhibiting the expression of VEGF, e.g. for the treatment of diseases associated with abnormal vascular permeability, cell proliferation, cell permeation, angiogenesis, necvascularisation, tumour cell growth and/or metastasis. AAA06734 represents a human VEGF nucleotide sequence from which the
                                                                                                                                                                                                                      Novel oligonucleotides corresponding to a part of a vascular endothelial growth factor, useful for treating e.g. tumor cell growth and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

0.5%; Score 11.4; DB 1; Length 14;
Best Local Similarity 92.3%; Pred. No. 5.2e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seguence 14 BP; 1 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                 (HMRI ) HOECHST MARION ROUSSEL DEUT GMBH.
                                                                                                                                                                                                                                                                                                             Disclosure; Page 3; 73pp; English.
                      98EP-00114853.
                                                           98EP-00114853.
                                                                                                                                           Ulhmann E, Peyman A,
                                                                                                                                                                                     WPI; 2000-258586/23
                      07-AUG-1998;
                                                                                                                                                                                                                                                                       metastasis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAC66742;
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1084 CCAGGCTTCACCC 1096 CCAGGCTGCACCC 1

Heterologous insert sequence #3. 742/c AAC66742 standard; DNA; 14 BP. (first entry) 15-FEB-2001

Probe; cytostatic; antiviral; gene therapy; ss. Unidentified

40200063365-A1.

21-APR-2000; 2000WO-US010909 99US-0130345P 21-APR-1999;

(PANG-) PANGENE CORP.

WPI; 2000-647516/62

Belotserkovskii B, Reddy G,

Zarling D;

Composition for modulating transcription or replication of a pre-selected target sequence and for treating a plant or animal disease, comprises a recombinase and two probes, each containing a homology clamp and an

Disclosure; Fig 9; 103pp; English. anchoring sequence

Bitonti AJ, Woessner RD;

The present invention relates to a composition comprising a recombinase and two complementary single stranded probes each containing at least one homology clamp corresponding or complementary to a preselected target nucleic acid sequence and at least one anchoring sequence. The present nucleic acid sequence and at least one anchoring sequence. The present can be used in the present invention. The composition of the present invention can be used in the present transcription or replication of a present caused by expression of a disease gene, detect a double stranded mucleic acid target sequence, isolate either strand of a gene family, produce a transgenic non-human organism or plant, determine the function of a couble stranded nucleic acid target sequence and inhibit double stranded a couble stranded nucleic acid target sequence and inhibit double stranded nucleic acid rotation or branch migration. In addition, the composition may be used to produce animal models for genetic defects

Sequence 14 BP; 0 A; 0 C; 8 G; 6 T; 0 U; 0 Other;

ö ö Ouery Match 0.5%; Score 11.4; DB 1; Length 14; Best Local Similarity 92.3%; Pred. No. 5.2e+02; Matches 12; Conservative 0; Mismatches 1; Indels

1250 ACCCCATCCCCAA 1262 13 ACCCCAACCCCAA 1 g à

ADB68047 standard; DNA; 14 BP. RESULT 1050 ADB68047/c

ADB68047;

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Gaps ; 0 (first entry) 04-DEC-2003

G4 phosphorothicate oligonucleotide 1 used to modulate telomere length. telomere length; aging; hyperproliferative condition; cancer; ss; G4.

Unidentified.

US2003096776-A1. 22-MAY-2003

92US-00954185. 93WO-US009297. 95US-00403888. 99US-00299058. 02-JAN-2002; 2002US-00038335 29-SEP-1992; 29-SEP-1993; 12-JUN-1995; 23-APR-1999;

Hanecak RC, Anderson KP, Bennett CF, Chiang Ecker DJ, Vickers TA, Myatt JR; (ISIS-) ISIS PHARM INC.

Brown-Driver VL;

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New chemically modified oligonucleotides, useful for modulating telomere length of a mammalian chromosome, inhibiting the division of a malignant mammalian cell, or modulating the effects of aging of a mammalian cell. WPI; 2003-606442/57.

The invention relates to a novel chemically modified oligonucleotide having no more than about 27 nucleic acid base units. The oligonucleotide modulates mammalian telomere length. The chemically modified oligonucleotide of the invention may be useful for modulating the Example 2; Page 6; 10pp; English.

Sequence 14 BP; 0 A; 0 C; 8 G; 6 T; 0 U; 0 Other;

Gaps ; 0 Score 11.4; DB 1; Length 14; Pred. No. 5.2e+02; 0; Mismatches 1; Indels 0.5%; Query Match
Best Local Similarity 92.34
Matches 12, Conservative ŏ

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1051 RESULT 10 ADE14064

ADE14064 standard; DNA; 14 BP.

ADE14064;

(first entry) 29-JAN-2004 Optineurin promoter motif, repeat element or regulatory region #173.

Human, optineurin, ds, ophthalmological, single nucleotide polymorphism, SNP; glaucoma, progressive ocular hypertensive disorder; glaucoma related disorder; motif, repeat element, regulatory region.

Homo sapiens.

US2003190617-A1

09-OCT-2003.

06-MAR-2002; 2002US-00091281.

06-MAR-2002; 2002US-00091281.

(SIEE/) SI E. (RAYM/) RAYMOND V. (MORI/) MORISSETTE J.

Raymond V, Morissette J,

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SJ.

WPI; 2003-864168/80.

New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and related disorders

Claim 11; SEQ ID NO 175; 159pp; English

The invention relates to an isolated nucleic acid (NI) comprising at least 20 but not more than 1500 consecutive nucleotides of the optineurin promoter appearing as ADEI390. Also included are the optineurin promoter operably linked to a heterologous nucleic acid, a nucleic acid capable of detecting a single nucleotide polymorphism (SNP) in the optineurin promoter, opromoter, a host cell comprising the promoter operably linked to a heterologous sequence, diagnosing or promoter operably linked to a heterologous sequence, diagnosing or promoter operably linked to a heterologous sequence, diagnosing or promoter operably linked to a heterologous sequence, diagnosing or promotering allowed to a new percent of the optineurin gene, associated with a glaucoma phenotype), detecting a SNP sequence variation in a sample containing DNA, detecting the presence of an optineurin promoter sequence variation in a sample containing DNA, determining the presence or increased succeptibility to glaucoma or to a progressive ocular hypertensive disorder resulting in loss of visual field in a patient (or the severity or progression of glaucoma in a patient, comprising providing

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amplification reaction primers that direct amplification of a selected nucleic acid region containing the variation within the optineurin promoter and amplifying the DNA) and detecting a polymorphism (comprising obtaining a sample containing human genomic DNA, providing a nucleic acid capable of detecting a SNP located within an optineurin promoter, and detecting the polymorphism). The invention is used to diagnose and prognose glaucoma and also to treat glaucoma related disorders. The present sequence is an optineurin promoter motif, repeat element or putative regulatory region.
                                                                                                                                                                  Gaps
                                                                                                                                                                    .
0
                                                                                                                                         Score 11.4; DB 1; Length 14; Pred. No. 5.2e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                              Oligonucleotide used in the course of the invention.
                                                                                                                     Seguence 14 BP; 3 A; 4 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                     Werner's syndrome; diagnosis; ss.
                                                                                                                                                                                                                                                                         AAV65725 standard; DNA; 14 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                24 LJAN-1997; 97JP-00011268.
                                                                                                                                          0.5%;
                                                                                                                                                                                         844 CCCCAGATTGAGA 856
                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                         Query Match
Best Local Similarity 92.3<sup>3</sup>
Matches 12, Conservative
                                                                                                                                                                                                              13
                                                                                                                                                                                                                1 ccccadarregea
                                                                                                                                                                                                                                                                                                                       10-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                  JP10201498-A
                                                                                                                                                                                                                                                                                                                                                                                                                                          04-AUG-1998.
                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                AAV65725;
                                                                                                                                                                                                                                                    RESULT 1052
                                                                                                                                                                                                                                                              88888888888
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Oligonucleotides AAV65723-25 are used in the course of the invention. The specification describes the detection of a mutation in a gene causing human Werner's syndrome. The method comprises amplifying a DNA fragment containing a mutation at position 733, 734, 1620 or 4146 of AAV65701 or at position 42 of AAV65702 and synthesising an oligonucleotide so that the base at the above site comes to be the 3' end based on the base sequence of AAV65701-02, or an oligonucleotide in which the base adjacent to the 3' end comes to be the 5' end. The oligonucleotides are hybridised with the resultant amplified fragment. The method can be used to diagnose Werner's syndrome Claim 7; Page 9; 17pp; Japanese.

- and and

Detection of mutation in gene causing human Werner's syndrome oligo:nucleotide used for detection, comprises amplifying DNA synthesising oligo:nucleotide.

97JP-00011268.

24-JAN-1997;

(EIJI-) EIJIN KENKYUSHO KK.

WPI; 1998-474499/41.

Sequence 14 BP; 0 A; 1 C; 1 G; 12 T; 0 U; 0 Other;

Gaps ö 0.5%; Score 11.4; DB 1; Length 14; larity 92.3%; Pred. No. 5.2e+02; Conservative 0; Mismatches 1; Indels Query Match Best Local Similarity Matches 12; Conserv

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1967 TTTTTTTTTTT 1979 |||| |||||||||| TTTCTTTGTTTTT 13

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Oligomer; specificity; pseudonucleotide; anthraquinone; in vitro; in vivo; hybridisation; antisense therapy; stability; diagnosis; ss.

Pseudonucleotide containing oligomer 1.

(first entry)

22-SEP-1993

AAQ42793;

BP.

2793/c AAQ42793 standard; DNA; 15

RESULT 1054 AAQ42793/c

/*tag= a /note= "Pseudonucleotide containing anthraquinone"

Location/Qualifiers

Key misc_difference 15 /*

Synthetic

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Immunosuppressant inhibitor; transforming growth factor beta, TGF beta, vascular endothelial growth factor; VEGF; interleukin-10; IL-10; cancer; prostealandin E2; pGE2; immune response, tumour; asthma, orchn's disease; monocyte chemotactic protein-1; MCP-1; ulcerative collitis; diabetes; glomerulonephritis; acute respiratory distress syndrome; ss;
                                                                                                                                                                                                                                                                                                                                                    Composition containing immune stimulant and inhibitor of agent tadversely affects the immune response, for treating cancers and
                                                                              Immunosuppressant inhibitor oligonculectide TGF-beta2-15/1.
                                                                                                                                                                                                                                                                                        (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                                                                                                                                                                                                                                                            Schlingensiepen K, Schlingensiepen R,
                  AAZ65471 standard; DNA; 14 BP.
                                                                                                                                                                                                                                                                                                                                                                                             Claim 5; Fig 1; 30pp; English
                                                                                                                                                                                                                                                         98EP-00110709
98EP-00113974
                                                           (first entry)
                                                                                                                                                                                                                                                                                                                               PI; 2000-097470/08
                                                                                                                                                     atherosclerosis
                                                                                                                                                                         Unidentified.
                                                                                                                                                                                                                                                       10-JUN-1998;
25-JUL-1998;
                                                           30-MAR-2000
                                                                                                                                                                                            409963975-A2
                                                                                                                                                                                                                                      .0-JUN-1999;
                                                                                                                                                                                                                 16-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                        infections.
                                       AAZ65471;
RESULT 1053
AAZ65471/c
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Brysch W;

This sequence is an immunosuppressant inhibitor oligonucleotide, which is used in the invention. The invention relates to a composition which used in the invention. The invention relates to a composition which contains at least one inhibitor (less than 100 kD) of a substance (e.g. transforming growth factor TGF-Deta, vascular endothelial growth factor VEGF, interleukin-10 IL-10, prostaglandin E2 FGE2, or their receptors) that adversely affects the immune response. The composition also includes at least one stimulant that positively affects the immune response. This oligonuclectide is an example of an inhibitor that is used in the treatment of neoplasms and infections, particularly hyperproliferation; composition. The composition is used in immunostimulant for the treatment of neoplasms and infections, particularly hyperproliferation; leukaemia; (non-)Hodgkin's lymphoma; carcinoma (of oscophagus, bronchi, colon-rectum, stomach, intestine, gall bladder or bladder), liver tumours, breast, ovary, cervix, endometrium, prostate or bladder), liver tumours, carcinoma arcomass. The oligonuclectides, most of which are directed against TGFbera or VEGF, are inhibitors of monocyte chemotactic protein-1 (MCP-1) and are useful as anti-infimatories for treating e.g. asthma, Crohm's disease, ulcerative colitis, diabetes, glomerulonephritis, acute respiratory distress substances or atterness or expense.

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Gaps

.; 0

Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels

1015 GAAAAAGAGGGG 1027

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13 GAAAAAGAGAGGG 1

Sequence 15 BP; 0 A; 7 C; 0 G; 7 T; 0 U; 1 Other;

The sequences given in AAQ42793-802 are oligomers which contain pseudonucleotides which contain anthraquinone. These oligomers were tested for stability in vitro and in vivo, and specificity of hybridisation to complementary DNA and RNA. Hybridisation was increased with respect to DNA and RNA complement in almost all cases. The oligomers which contain two anthraquinone modifications generally show cumulatively enhanced stability as compared to those with only one such residue. These oligomers are useful for therapeutic, esp. antisense therapy, diagnostic and research applications

Modified oligo:nucleotide(s) conjugates to anthraquinone - useful as anti-sense agents for treating and diagnosing diseases.

90US-00482941. 90US-00482941.

20-FEB-1990; 20-FEB-1990;

US5214136-A 25-MAY-1993 (GILE-) GILEAD SCI INC. Matteucci M;

WPI; 1993-181844/22.

Lin KY,

Disclosure, Table 1; 6pp; English.

Sequence 14 BP; 0 A; 3 C; 5 G; 6 T; 0 U; 0 Other; Query Match
Best Local Similarity 92.5.
Best Local 21 Conservative

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Oligomer; specificity; pseudonucleotide; anthraquinone; in vitro; in vivo; hybridisation; antisense therapy; stability; diagnosis; ss.
                                                              Pseudonucleotide containing oligomer 4.
                                    (first entry)
                                    22-SEP-1993
           AAQ42796;
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AAQ42796 standard; DNA; 15 BP.

RESULT 1055

AAQ42796/

.. 0

Gaps

; 0

0.5%; Score 11.4; DB 1; Length 14; 92.3%; Pred. No. 5.2e+02; tive 0; Mismatches 1; Indels

20 CCCAAAGGCCAGA 32 CCCAAAAGCCAGA 2

8 a

14

Tue Mar

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23-FEB-1995;
                                                                                                                                                                                                              23-SEP-1994,
                                                                                                                                                                                                                                                                 11-OCT-1994
           31-AUG-1995
                                                                                                                                                      16-AUG-1994
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                                                                                                                                                                                                                                                                                  The sequences given in AAQ42793-802 are oligomers which contain pseudonucleotides which contain anthraquinone. These oligomers were tested for stability in vitro and in vivo, and specificity of hybridisation to complementary DNA and RNA. Hybridisation was increased with respect to DNA and RNA complement in almost all cases. The oligomers which contain two anthraquinone modifications generally show cumulatively enhanced stability as compared to those with only one such residue. These oligomers are useful for therapeutic, esp. antisense therapy, diagnostic and research applications
                                                                                                                                                                                                                                Modified oligo:nucleotide(s) conjugates to anthraquinone - useful as anti-sense agents for treating and diagnosing diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogeneus leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atheroselerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                      ch 0.5%; Score 11.4; DB 1; Length 15; 1 Similarity 92.3%; Pred. No. 6.5e+02; 12; Conservative 0; Mismatches 1; Indels 0; Gaps
                                           /*tag= a
/note=-"Pseudonucleotide containing anthraquinone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human relA hammerhead ribozyme target sequence (nt. position 349)
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 0 A; 7 C; 0 G; 7 T; 0 U; 1 Other;
                      Location/Qualifiers
                                                                                                                                                                                                                                                                Disclosure; Table 1; 6pp; English.
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                                                                                                                      90US-00482941.
                                                                                                                                          90US-00482941.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1015 GAAAAGAGGGGG 1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT55043 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAAAAGAGAGGG 2
                                                                                                                                                                 (GILE-) GILEAD SCI INC.
                                                                                                                                                                                      Matteucci M;
                                                                                                                                                                                                            WPI; 1993-181844/22.
                               misc_difference
                                                                                                                      20-FEB-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-MAR-2003
18-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9523225-A2
                                                                                                                                            20-FEB-1990;
                                                                           US5214136-A
                                                                                                25-MAY-1993
 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT55043;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1056
                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the nucleotide base position indicated in the DEI line. The relA gene product is a subunit of the transcriptional regulator NF-kappaB and is implicated specifically in the induction of inflammatory responses. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit relA expression, making them potentially useful for treating rheumatoid arthritis, restenosis and asthma as well as for increasing tolerance to transplanted tissues. The potential communosuppressive properties of a ribozyme that cleaves relA mRNA means that uses are limited to local delivery, acute indications or ex vivo treatment. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Grimm S, Karpeisky A, Kisich K, Marulic-Adamic J, Mcswiggen JA; Modak A, Pavco P, Baljeman L, Sullivan SM, Sweedler D, Thompson JD; Tracz D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 2; Page 228; 407pp; English.
                                                    94US-00201109.
94US-00218934.
94US-00224483.
94US-00224483.
94US-002245736.
94US-00245736.
94US-00291433.
94US-00291632.
94US-00291632.
94US-00391633.
94US-00311749.
94US-00311749.
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95WO-IB000156
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 GAGCUUGUAGGAA 15
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Matches 10; Conservative
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RESULT 1058
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Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Belgleman L, Sullivan SM, Swedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                             Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; archeroselerosis; myorardial infarction; stroke; restenosis; transplant rejection; rheumaticid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                Human ICAM hammerhead ribozyme target sequence (nt. position 807)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 2; Page 172; 407pp; English.
                                                                                                                                                                                                                                                                                              940S-00227958.
940S-0022736.
940S-00271236.
940S-00291332.
940S-00291433.
940S-00291433.
940S-00300000.
940S-00311486.
940S-00311486.
940S-00311486.
940S-00311486.
940S-00311486.
940S-00311486.
940S-00311487.
940S-00311487.
                          BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM INC.
                          AAT51874 standard; RNA; 15
                                                         (revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                        03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                 23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                17-AUG-1994;
                                                        25-MAR-2003
09-MAR-1997
                                                                                                                                                                                                                                 31-AUG-1995.
                                                                                                                                                                                                                                                                                                                                         16-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Grimm S,
Modak A,
Tracz D,
                                         AAT51874;
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         RESULT 1057
                  AAT51874
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A claimed enzymatic RNA mol. for the cleavage of apolipoprotein (a) (apo(a)) mRNA, specifically a hammerhead ribozyme, has binding arms complementary to the present sequence (nucleotide position 12974). The ribozyme blocks to some extent apo(a) expression, and can therefore be used to diagnose or treat conditions related to lipoprotein (a) levels, e.g. atherosclerosis, myocardial infarction, stroke, restenosis and heart transcription from human apo(a) cDNA clones. Labelled transcripts were synthesised in vitro to form 2 templates. The oligonucleotides and incubated. After a designated time the reactions were stopped, and RNA sepd. on sequencing polyacrylamide gels. The percentage of substrate cleaved was determined by autoradiographic quantification, and the most
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                       enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and harzpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatchia transplant sathma and other inflammatory disorders. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Enzymatic RNA mols. which cleave apo(a) mRNA - useful in diagnosis and treatment of conditions related to Lp(a) levels, e.g. atherosclerosis, myocardial infarction, and heart diseases.
represents a preferred target sequence for an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (nt. pos. 12974) hammerhead ribozyme target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bnrymatic RNA molecule; cleavage; apolipoprotein (a); apo(a);
hammerhead ribozyme; target sequence; diagnosis; treatment;
lipoprotein (a); atherosclerosis; myocardial infarction; stroke;
restenosis; heart disease; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.5%; Score 11.4; DB 1; Length 15; 76.9%; Pred. No. 6.5e+02; tive 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Newton RS, Ramharack R;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 2 A; 7 C; 4 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 2; Page 18; 37pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT37613 standard; mRNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95WO-US011995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 76.9
Matches 10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-SEP-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9609392-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-MAR-1996.
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BP.

2 UCCUCUUCAUUUG 14

(first entry)

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Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment of
                                                                                                                                                                                                    Human B7-1 hammerhead ribozyme target SEQ ID NO:1157.
                                                                                          AAX64525 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
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Mcswiggen J,
Karpeisky A,
                                                                                                                                                                                                                                                                                                                  diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
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                                                                                                                                                                 20-JUL-1999
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02-MAY-1995;
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07-AUG-1995;
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                                                                                                                             AAX64525;
                                                         RESULT 1060
                                                                            AAX64525
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A claimed enzymatic RNA mol. for the cleavage of apolipoprotein (a) (apo(a)) maRNA, specifically a hammerhead ribozyme, has binding arms complementary to the present sequence (nucleotide position 12976). The ribozyme blocks to some extent apo(a) expression, and can therefore be used to diagnose or treat conditions related to lipoprotein (a) levels, e.g. atherosclerosis, myocardial infarction, stroke, resenosis and heart disease. PCR was used to generate a substrate for T? RNA polymerase transcription from human apo(a) cDNA clones. Labelled transcripts were superated to form 2 templates. The olloquucleotides and labelled transcripts were annealed, RNaseH added and the mixts. incubated. After a designated time the reactions were stopped, and RNA septo. on Sequencing polypacrylamide gals. The percentage of substrate cleaved was determined by autoradiographic quantification, and the most accessible ribozyme target sites chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Enzymatic RNA mols. which cleave apo(a) mRNA - useful in diagnosis and treatment of conditions related to Lp(a) levels, e.g. atherosclerosis, myocardial infarction, and heart diseases.
                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                       Apo(a) mRNA (nt. pos. 12976) hammerhead ribozyme target seguence.
                                                                                                                                                                                                                                                                                                                                                                                                                         Enzymatic RNA molecule; cleavage; apolipoprotein (a); apo(a); hammerhead ribozyme; target sequence; diagnosis; trearment; hipoprotein (a); atherosclerosis; myocardial infarction; stroke; restenosis; heart disease; human; ss.
                                                                                                            ..
                                                                        Length 15;
                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Newton RS, Ramharack R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 3 A; 4 C; 1 G; 0 T; 7 U; 0 Other;
                                   Sequence 15 BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;
                                                                      Score 11.4; DB 1;
Pred. No. 6.5e+02;
                                                                                                            6; Mismatches
accessible ribozyme target sites chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 2; Page 18; 37pp; English.
                                                                                                                                                                                                                                                                           BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94US-00311760.
                                                                    Query Match
Best Local Similarity 46.2%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                       AAT37615 standard; mRNA; 15
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                                                                                                                                             933 CCTCCTCTTCATT 945
                                                                                                                                                                                                                                                                                                                                                    (first entry)
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CAUCCUCUUCAUU 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-MAR-1996.
                                                                                                                                                                                                                                                                                                              AAT37615;
                                                                                                                                                                                                                                        RESULT 1059
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94US-00363253. 94US-00363254. 95US-00426124. 95US-00432874. 95US-0000951P. 95US-0000974P.

95US-00541365

95WO-US015516 94US-00354920

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The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising: (i) at least 5 ribbse residues (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least ten 2'-O-methyl modification at position 4 of the ENA; (iii) at least ten 2'-O-methyl modification; and (iv) a 3'-end modification. The ENA's can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis, particularly osteoarthritis or rheumatoid arthritis. The ENA's can also be used to treat antigen presenting cells of a donor to induce tolerance in an alloantigen of a donor. They can also be used for enhancing graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis Riboxyme therapy impacts on the expression of expression which accompany treatment with retinoids and dexamethasone. The present sequence is used in the exemplification of the
                                                                                                           Claim 10; Page 166; 307pp; English.
auto-immune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                present invention
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G; 0 T; 2 U; 0 Other;

Sequence 15 BP; 7 A; 1 C; 5

Gaps

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i; Indels

Score 11.4; DB 1; Length 15; Pred. No. 6.5e+02; 6; Mismatches 1; Indels

Query Match
Best Local Similarity 46.2%;
Matches 6; Conservative

935 TCCTCTTCATTGG 947

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Stinchcomb DT, Jarvis T, Draper K, Pavco P; Gustofson J, Usman N, Wincott F, Matulic-Adamic J; Thompson JD, Modak A, Burgin A;

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Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage; neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy; reverse cholesterol transport; high density lipoprotein; therapy; CETP; familial hypercholesterolaemia; dypslipidaemia; hyposlphalipoproteineemia; peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor; angloplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA useful for preventing or treating initial development, progression or regression of vascular diseases, esp. familial hypercholesterolaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Couture L, Stinchcomb D, Mcswiggen J, Bisgaier C,
                                                                                                                                        Rabbit CETP HH ribozyme target sequence #323.
                   AAT50145 standard; RNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94US-00363240.
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                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                          Oryctolagus cuniculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1996-321852/32.
                                                                                                                                                                                                                                                                                                                                                                                WO9620279-A1.
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                                                                                                 07-MAR-1997
AAT50145/c
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or double-strand DNA at homopurine-homopyrimidine targets. These
triplexes block in vitro DNA synthesis by all DNA polymerases studied,
including Sequenases. Tag, Vent, and Pol I. A similar phenomenon occurs
when DNA polymerases are supplemented with accessory replication
proteins, including SSB protein. Replication blockage is highly sequence-
specific and even one or two point substitutions within either the target
sequence or the oligonucleotide abolish the effect. Sequence-specific
blocking of DNA replication in vivo is facilitated by the methods and
compositions of the present invention. The present sequence is a triplex-
forming oligonucleotide which targets ORF-EC of human papilloma virus
(position 436-452 in HPV57 and 438-452 in HPV2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence specific inhibition of DNA synthesis - by triplex-forming oligo:nucleotide(s), for detection of oncogene mutation(s) and treatment of e.g. HSV, Hepatitis C and Papillomavirus infection.
                                                                                                                                                                                                                                                                                                                                                                                                 HPV; oligodeoxyribonucleotide; homopurine-homopyrimidine target; block; in vitro; DNA synthesis; DNA polymerase; Sequenase3; Taq; Vent; Pol I; accessory replication protein; SSB protein; sequence-specific; triplex forming oligonucleotide; exon 3; inverted repeat; IR110; human papilloma virus; ORF-EC; ss.
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                                                             Gaps
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                   0.5%; Score 11.4; DB 1; Length 15; larity 76.9%; Pred. No. 6.5e+02; Conservative 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                             Priplex-forming oligonuclectide targetting HPV ORF-Ec.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mirkin SM, Samadashwily GM;
                                                                                                                                                                                                                                        AAT35030 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         932 CCCTCCTCTTCAT 944
                                                                                                    806 ACTGTAAGAAAG 818
                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                        3 ACUGUAAGAAGAG 15
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                     Query Match
Best Local Similarity
Matches 10; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                  AAT35030;
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                                                                                                                                                                                                   RESULT 1061
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Matches
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Pape

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AAT50138-T50359 represent target sequences for the rabbit cholesterol ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT50360-765045). CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers to the position of the cleavage site in full length CETP. The ribozyme are then binds to 5 nucleotides either side of this site. The ribozymes are able to cleave mRNA from the gene encoding CETP, thereby blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the reverse cholesterol transport (RCT) pathway can be inhibited (or eliminated) thereby preventing the reduction in size density of the high density of lipoproteins (HDL), prolonging HDL half life, and therefore increasing the abnormal levels of CETP, specifically atherosclerosis, familial chances of diabetes, transplant, atherosclerosis, familial hypercholesterolaemia, peripheral vascular disease, dyslipidaemia, hypoalphalipoproteinaemia, vascular complications of diabetes, transplant, atherectomy and angioplastic restenosis. By inhibiting CETP, the levels of HDL and low density createnosis. By inhibiting CETP, the levels of HDL and low density of decrease in LDL levels, and a corresponding increase in HDL levels. The HDL levels of HH bibozymes can also be used diagnostically to study genetic drift and mutations in diseased cells, and cofect CETP mRNA. As the HH ribozymes corresponding increase in HDL levels of the CETP gene, they have low non-specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
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Claim 4; Page 40; 72pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1255 ATCCCCAACCCC 1267
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RESULT 1062

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PCR primers AAV43307-08 were used to amplify nucleic acid ligands of ICP4, which were isolated using the SELEX (Systematic Evolution of Liganda by Exponential enrichment) procedure. ICP4 is the major transcriptional regulator of Herpes simplex virus (HSV) gene expression. The specification describes a method for the identification of nucleic acid ligands to an ICP4 protein family member (PRM), which uses the SELEX procedure. The method is used to yield a mixture of nucleic acids enriched for nucleic acid sequences with relatively higher affinity and specificity for binding ICP4 protein family member. The nucleic acid ligands identified are used in the treatment or prevention of diseases or medical conditions in humans, specifically those caused by herpes viruses. They may also be used in diagnostic procedures
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identification of nucleic acid ligands to ICP4 protein family member comprises preparing candidate mixture of nucleic acids, contacting candidate mixture of nucleic acids with ICP4, partitioning increased affinity nucleic acids, and amplifying.
             ICP4; transcriptional regulator; Herpes simplex virus; HSV; nucleic acid ligand; treatment; prevention; disease; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ErbB-2; antisense oligonucleotide; modulate; gene expression; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 3 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ErbB-2 gene antisense oligonucleotide ErbB-2-82.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Col 23; 36pp; English
                                                                                                                                                                                                                                                                                                                                                                            Gold L, Rabin RS;
                                                                                                                                                                                                                                               90US-00536428.
91US-00714131.
95US-00409442.
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                                                                                                                                                                                                                                                                                                                                 (NEXS-) NEXSTAR PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAGGACAGTGC 13
                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1998-466659/40.
                                                                                                                                                                                                                                               11-JUN-1990;
10-JUN-1991;
24+MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                              Jayasena SD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-JAN-1997;
                                                                                                                                                                                                         25-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EP856579-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-AUG-1998
                                                                                                                       US5795721-A
                                                                                                                                                                18-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV48790;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes nucleic acid molecules which modulate the structures, expression and/or stability of a mann encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the final-like tyrosine kinase 1 (flt.1), kinase insert domain containing receptor (KDR) and/or foctal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAAK5755 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                               Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KER; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer used to amplify nucleic acid ligands for ICP4.
                                                                                                                                                                                                         Human flt-1 and KDR hammerhead ribozyme target site #17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stinchcomb D, Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 5 A; 1 C; 5 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 9; Page 191; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV43307 standard; DNA; 15 BP.
                                                                            AAX75683 standard, RNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95US-005974P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (RIBO-) RIBOZYME PHARM INC. (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                28-JUL-1999 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pavco P, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-OCT-1995;
11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                         WO9715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV43307;
                                                                                                                       AAX75683;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1064
                                      RESULT 1063
AAX75683/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV43307
ID AAV4
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AC AAV4
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DT 26-0
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DE PCR
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Gaps

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The invention relates to a method for producing polynucleotides having a defined sequence using rolling templates that successively add nucleotides (nts) to a longer primer strand. The method comprises: (i) incubating, under annealing conditions, a primer and a template that has
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 5; Page 38; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX34457
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                           AAV48709-886 represent antisense oligonucleotides directed against the ExbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in Significant reddution in ExbB-2 protein expression, while oligonucleotides AAV48792-886 had little effect. The oligonucleotides exemplify the invention. The specification describes oligonucleotides that that contain 8-30 nucleotides, which contain at most B nucleotides that consecutive nucleotides able to form three H-bonds each to four consecutive rucleotides able to form three H-bonds each to four consecutive cytosines, and the ratio between residues able to form two H-bonds each to three such bonds (3R) is given by 2R/3R = 0.33-0.72. The cytosines, and the ratio between residues able to form two H-bonds each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The cytosines, and the ratio between residues able to form two H-bonds each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The cytosines for p53, ErB-2, junb, junb, TGP-beta 1 or beta 2 to control proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The coligonucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases of cancer or (targeting TGF) for stimulating the immune system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                              Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive quanosine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapputically or to modulate growth of cells in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Transcript tag sequence increased in pancreatic and colorectal cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pancreatic cancer; colon cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 2 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tag sequence; colorectal cancer; diagnosis; prognosis; treatment;
                                                                                                                                                                                                                                                  Claim 10; Fig 6b; 286pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX31787 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98WO-US010277
                                                                                Schlingensiepen K, Brysch W;
                97EP-00101531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYJO ) UNIV JOHNS HOPKINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          752 GCACCTGCCATGC 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14 GAACCTGCCATGC 2
                                                                                                                  WPI; 1998-400910/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-MAY-1999
                 31-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX31787;
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differentially expresent tag sequences of transcripts that are differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to isolate unidentified genes from cDNA libraries. The tag sequences can sample bused in a method for diagnosting colon or pancreatic cancer in a sample suspected of being neoplastic. The method comprises comparing the level of at least one transcript in a first sample of a tissue to a second sample, where the first sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and
                                                                 use of isolated gene transcripts - useful for developing products for the diagnosis, prognosis and treatment of cancers, particularly colon and pancreatic cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rolling template; nucleic acid synthesis; polynucleotide polymerase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Producing specific polynucleotides using rolling templates.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 1 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                               Disclosure; Page 79; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX34457 standard; DNA; 15 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene production; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1249 GACCCCATCCCCA 1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Template sequence codon 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-JUN-1999 (first entry)
Kinzler KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 92.3
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 GACCCCAGCCCCA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-244045/20.
                                           WPI; 1999-070161/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         treatment of cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hiatt AC, Rose FD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (HIAT/) HIATT A C. (ROSE/) ROSE F D.
  Vogelstein B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-SEP-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15~SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX34457;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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schultz451-l.rng
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the 3'-region not complementary to the primer, a 3'-region complementary to the 3'-red of primer and a non-reactive 3'-remninus, with the template being shorter than the primer (ii) reacting the primer with at least one of a template-dependent polymortectide polymerase to extend it by at least one in (complementary to the 5'-region of template) at its 3'-end, (iii) separating the template and the extended primer; and it its 3'-end, (iii) separating the template and the extended primer; and (iv) repeating the cycle of (i) (iii) as often as needed to synthesize the desired polymorlectide. The method is especially used to produce synthesis of RNA or DNA and is more efficient than chemical coupling processes. It has higher specificity and eliminates the need for deprotection. The products can be cloned directly. The method avoids problems of waste disposal and includes an inherent editing effect (failure sequences will not be extended further in subsequent rounds) so that purification of the end product is facilitated. Synthesis may take place on a vector, simplifying cloning and sequences with codon usage optimized for a particular host can be prepared
          8888888888888888888888888888888888888
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Sequence 15 BP; 5 A; 2 C; 6 G; 2 T; 0 U; 0 Other;

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Gaps
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0
0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02; tive 0; Mismatches 1; Indels
                                  12, Conservative
                    Local Similarity
                                Matches
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931 TCCCTCCTCTTCA 943 ò g

AAA26829

AAA26829 standard; DNA; 15 BP.

AAA26829;

(first entry) 29-JUN-2000

Trichosporon aquatile polynucleotide sequence SEQ ID NO:96.

Trichosporon genus microbe; detection; species-specific; diagnosis; trichosporosis; ds.

Trichosporon aquatile.

JP2000060564-A.

29-FEB-2000.

24-AUG-1998;

98JP-00237060. 24-AUG-1998;

(IATR) IATRON LAB INC.

WPI; 2000-249679/22.

Species-specific detection of a Trichosporon genus microbe species and a new polynuclectide - used for the diagnosis and the treatment of Trichosporosis.

Disclosure; Page 44; 47pp; Japanese.

The present invention describes a method for the species-specific detection of a Trichosporon genus microbe which includes detecting a polynucleotide specific to the species of a Trichosporon genus microbe. Trichosporon polynucleotides can be used for the diagnosis and treatment of Trichosporonsis. The method can distinguish Trichosporosis species to species level rapidly in high precision. AAA2674 to AAA26849 represent polynucleotide sequences from various Trichosporon species, which are used in the exemplification of the present invention

Sequence 15 BP; 5 A; 2 C; 2 G; 6 T; 0 U; 0 Other;

Gaps .. 0 Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels 940 TICATIGGITIAA 952 1 TrcArrectram 13 ઠે g

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AAA58317 standard; DNA; 15 BP. RESULT 1069 AAA58317/c

AAA58317;

(first entry) 17-OCT-2000 C. jejuni and C. coli sodB gene downstream bumper primer BR42.

Acute diarrhoeal disease, sodB, superoxide dismutase, primer, BR42; bacterial detection, ss.

; 0

Campylobacter coli. Campylobacter jejuni.

US6066461-A.

23-MAY-2000.

99US-00289747. 12-APR-1999; 99US-00289747. 12-APR-1999;

You Q, Mcmillian RA,

(BECT) BECTON DICKINSON & CO.

WPI; 2000-410645/35.

New kit comprising amplification primers AL46, AL44, AL42, AR48, AR44 or AR42, bumpers BL42 or BR42, and detectors DL52 or DR48 useful for detecting Campylobacter jejuni or C. coli sodB gene.

Claim 1; Col 5-6; 13pp; English.

Campylobacter coli and C. jejuni are causative species of acute diarrhoeal disease in humans. The present invention relates to detection of these bacteria, in humans, by using nucleic acid primers in Strand Displacement Reactions (SDA). These primers are specific for the C. coli and C. jejuni superoxide dismutase (sodB) gene. The present sequence is one such primer, BR42. BR42 is a downstream bumper primer for C. jejuni and C. coli sodB. The primers may be used after culture as means for confirming the identity of the cultured organism, and with clinical samples from humans or animals, e.g. faecal material or with samples of contaminated food or water, for the detection and identification of C. ejuni or C. coli

Sequence 15 BP; 4 A; 2 C; 5 G; 4 T; 0 U; 0 Other;

Gaps .. 0 Ouery Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels

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RESULT 1070

BP AAA63414/c ID AAA63414 standard; DNA; 15

BXR

AAA63414;

99US-0140359P.

23-JUN-1999;

Snediyne

Shen B,

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Immunostimulatory nucleic acid; ISNA; human; interferon alpha; IFN-alpha; viral infection; phosphorothioate backbone; palindrome; cancer; ds.
                                                                                                                                                                                                                                                                                                      The present invention relates to an oligonucleotide array comprising oligonucleotide tags fixed to a solid substrate. The oligonucleotide array is useful for genotyping a nucleic acid sample at one or more loci via single base extension (SBE) reactions. A pair of primers is used to amplify a polymorphic locus in a sample e.g. a single nucleotide uspolymorphism (SNE). The present sequence is one of the primers used in the method of the present invention to amplify a polymorphic sample. The amplified nucleic acid product is then used as a template in a SBE reaction with an extension primer. The SBE reaction products are used to
                                                                                                                                                                                      Universal array of oligonucleotides tags attached to a solid substrate along with locus-specific tagged oligonucleotides useful in genotyping using single base extension reactions.
                                                                                         Lander ES, Lockhart DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        involving the administration of an isolated immunostimulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Poly-G immunostimulatory nucleic acid SEQ ID NO: 129.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 2 A; 3 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                             Kaplan P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Improving the efficacy of treatments interferon-alpha by co-administering nucleic acid.
                                 WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 24; 168pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bratzler RL, Krieg A;
                                                                                                                                                                                                                                                                         Example 7; Page 61; 70pp; English.
                                                                                             Huang X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               form the oligonucleotide array
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COLE-) COLEY PHARM GROUP INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1178 CGCTCCCCGCAG 1190
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF98848 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14 crecrececae
                                                                                             Hirschhorn JN,
                                                         AFFYMETRIX INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VPI; 2001-290487/30.
                                                                                                                                                      WPI; 2000-656171/63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                             Fan'J, Hirschhorn
Ryder T, Sklar P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200122990-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-JUN-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF98848;
                                    (WHED)
                                                         (AFFY-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1072
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention is concerned with the elucidation of the gene cluster from Streptomyces globisporus which regulates enediyne C-1027 synthesis. Enediyne C-1027 is an antibiotic, consisting of an apoprotein and a non-peptidic chromophore, which causes damage to DNA. The primers AAA63353-A63451 were used to isolate the open reading frames which comprise the gene cluster. The sequences within the gene cluster can be used to produce the protein and to identify antagonists, both of which can be used in the treatment of cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide array, genotyping, single base extension reaction, SBE, PCR primer; polymorphic locus; single nucleotide polymorphism; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Isolated nucleic acid comprising a nucleic acid encoding any of C-1027 open reading frames (ORFs) -7 to 42, excluding ORF 9 (cagA), useful for the production of enediyne C-1027 antitumor antibiotics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                               C-1027 biosynthesis gene cluster; apoprotein; chromophore;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 11.4; DB 1; Length 15;
Pred. No. 6.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Forward primer #125 used in multiplexing PCR/SBE assay.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 4 A; 1 C; 8 G; 2 T; 0 U; 0 Other;
                                                           C-1027 gene cluster reverse PCR primer for ORF 23
                                                                                                                                                                                                                                                                                                                                                                                                                     Standage S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure, Page 17; 160pp, English.
                                                                                                                                                                                                                                                                                                                                                                                                                       Liu W, Christenson SD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
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Best Local Similarity 92.3%;
Matches 12; Conservative 0
                                                                                                                                                                                                                                                                                                                     06-JAN-1999; 99US-0115434P.
                                                                                                                                                                                                                                                                               06-JAN-2000; 2000WO-US000446.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14 ccrrcaccrcars 2
                                                                                                                                                            Streptomyces globisporus
                                                                                                                                                                                                                                                                                                                                                                              (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-465947/40.
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                                                                                                                                                                                                   WO200040596-A1.
                                                                                                                  PCR primer; ss
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                       06-MAR-2001
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AAC73569

1071 RESULT 107; AAC73569/c

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Gaps

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present sequence may have a phosphorothioate backbone

Sequence 15 BP; 3 A; 2 C; 8 G; 2 T; 0 U; 0 Other;

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The present invention relates to a method for stimulating an immune response. The method comprises administering an immunostimulatory nucleic acid to a non-rodent subject in sufficient quantity to stimulate an immune response. The present sequence is one such immunostimulatory nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma, haemophilus, campylobacter, clostridium, Escherichia coli and/or staphylococcus), fungal antigens and/or parasitic antigens. The method is also useful for preventing cancer, asthma, infectious disease, allergy or immune deficiency. The present sequence can also be used to redirect a Th2 to a Th1 immune response and to activate immune cells. Note: the
               The present invention describes an improvement to a method requiring the administration of interferon alpha (IFN-alpha), involving administering an immunostimulatory nucleic acid (ISNA). The sequences of a number of such nucleic acids are also provided. These may comprise oligonucleotides with phosphorothioate backbones, palindromes, or G-rich sequences. The sequences of the invention are useful in the treatment of proliferative diseases, such as cancers, and viral infections. The present sequence is an example of an immunostimulatory oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic; mimunostimulacory; tumour; viral infection; bacterial infection; fungal infection; cancer; asthms; infection; pactasitic infection; cancer; asthms; infectious disease; allergy; immune deficiency; phosphorothicate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diseases, allergies and asthma nucleic acids.
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0
                                                                                                                                                                                                                                          0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02; iive 0; Mismatches 1; Indels
                                                                                                                                                                                                     Sequence 15 BP; 3 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Vaccinating against tumors, infectious using immunostimulatory Py-rich and TG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Immunostimulatory nucleic acid #827.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Vollmer J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
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27-SEP-1999; 99US-0156135P.
23-AUG-2000; 2000US-0227436P.
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                                                                                                                                                                                                                                                                                                                              1019 AAGAGGGGGAGCT 1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF99711 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                   ATGAGGGGGAGCT 15
                                                                                                                                                                                                                                                              Local Similarity 92.3
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(COLE-) COLEY PHARM GMBH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-273485/28
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                                                                                                                                                                                                                                               Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF9971
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contracting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the sreat ameliorating the effects of psoriasis, ichthyosis, pityriasis, brian, pilaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic misses of the inside of blood.
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                                                                                                                                                                                                                                                                                                                                                               Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; platis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neobascular condition; the retina; ss.
                                     Gaps
                                     ö
Length 15;
Score 11.4; DB 1; Length 1
Pred. No. 6.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 3 A; 0 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 6; Page 42; 201pp; English.
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                                                                                                                                                                                                               AAF46483 standard; DNA; 15 BP
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                                                                                                                                                                                                                                                                                                                                    IGFBP2 oligonucleotide #1322.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-JUN-2000; 2000WO-AU000693
  Query Match
Best Local Similarity 92.3%;
                                                                            1019 AAGAGGGGGAGCT 1031
                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                  3 ATGAGGGGGAGCT 15
                                         12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
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                      Best Loc
Matches
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1221 CCCCATCCTTGCG 1233

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IGFBP2 oligonucleotide #1325.

(first entry)

30-MAR-2001

AAF46486;

AAF46486 standard; DNA; 15

RESULT 1076

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                                                                                                                                                                                                                                                                                                                                                                            Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor. I receptor; IGFP-1; pityriasis, IGF binding protein, IGFB-2; IGFBP3; inflammation, psoriasis, pilaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis, kidney disease; neovascular condition; hyperplasis, kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                        Gaps
                                        ..
Score 11.4; DB 1; Length 15;
Pred. No. 6.5e+02;
0; Mismatches 1; Indels
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  0.5%;
                   92.3%;
                                                                             1258 CCCAACCCCTTC 1270
                                                                                                                                                                                                                     AAF46637 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                            GFBP3 oligonucleotide #57
                                                                                                                                                                                                                                                                                                   (first entry)
Query Match
Best Local Similarity 92.3
Matches 12; Conservative
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                                                                                                                      CACAACCCCCTTC 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                               Antisense therapy; antiproliferative; antinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; linsulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procter; IGFB-2; IGFBP3; inflammation; psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neobascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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Pred. No. 6.5e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 6; Page 42; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-JUN-2000; 2000WO-AU000693
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Best Local Similarity 92.35
Marches 12, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-041421/05
                                                                                                                                                                                                                                                                                                                                                                           WO200078341-A1
                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inflammation.
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Gaps

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Score 11.4; DB 1; Length 15; Pred. No. 6.5e+02; 0; Mismatches 1; Indels

Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative (

Seguence 15 BP; 1 A; 9 C; 3 G; 2 T; 0 U; 0 Other;

vessels or any other hyperplasia

AAF49844;

RESULT 1077

AAF49844

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Antisense therapy, antiproliferative; antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide; ophthalmological, keloid; skin disorder; Insulin-Ilve, Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasis, kidney disease; necovascular condition; hyperplasis; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                  IGF-I oligonucleotide #3596.
                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                                                             WO200078341-A1.
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                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wraight CJ,
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                         AAF52636;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to a method for ameliorating the effects of antisense oligonucleotide, (for Insulan-like Growth Factor [IGF] receptor, IGF binding protein [IGFBP] - 2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of section mediates a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                        Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keartosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplaia; kidney disease; neoblation of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 3 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MURD-) MURDOCH CHILDRENS RES INST.
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AAF52636/c
ID AAF52636 standard; DNA; 15 BP.
                                                                    AAF49844 standard; DNA; 15 BP
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                                                                                                                                                                                                             IGF-I oligonucleotide #804
                                                                                                                                                               (first entry)
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tes 12; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inflammation
                                                                                                                                                                  30-MAR-2001
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an cantiforned protein [Gornal Factor [168]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation.

CC inhibiting or reducing growth factor mediated cell proliferation of or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the attisense oligonucleotides of the present invention (see AAF4151 and AAF45153-C F43161). The method is useful for ameliorating the effects of psoriasis, crichtyosis, pityriasis, ruba, pilaris, perborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, chain or skin, growth factor-mediated malignancies, other sclerolic disease, kidney disease, hyperproliferation of the inside of blood
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 4 A; 2 C; 5 G; 4 T; 0 U; 0 Other;
Example 8; Page 84; 201pp; English.
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Best Local Similarity 92.3
Matches 12, Conservative
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Query Match

Matches

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Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis, IGF binding procein, IGFBP-2, IGFBP3, inflammation, psoriasis, pilatis, growth factor mediated cell proliferation; ichthyosis, serborrhoea, ruba, kearcosis, neophasia, scaleroderma, wart, skin cancer; sclerotic disease, hypermeovascular condition, hyperplasis, kidney disease; neovascular condition, free events.
                                                                                                                                                                                                                                                          Edmondson SR;
                                                                                                                                                                                                                                   (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                99US-0140345P.
                                                                                                                                                                                           21-JUN-2000; 2000WO-AU000693
          IGFBP3 oligonuclectide #56
                                                                                                                                                                                                                                                         Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                              WPI; 2001-041421/05.
                                                                                                                                                 WO200078341-A1
                                                                                                                                                                                                                 21-JUN-1999;
                                                                                                                             Homo sapiens.
                                                                                                                                                                     28-DEC-2000
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering V (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 44; 201pp; English

The present invention relates to a method for ameliorating the effects of antisense oligonucleotide, (for Insulin-like Growth Factor [IGF] receptor, IGF binding protein [IGFBP] or IGFBP], which is capable of inhibiting or reducing protein [IGFBP] 2 or IGFBP], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45153 oligonucleotides of the present invention (see AAF4151 and AAF45153 inchthyosis, pityriasis, ruba, pliaris, serborrhoea, Keloids, Keratosis, ichthyosis, pityriasis, ruba, pliaris, serborrhoea, Keloids, Keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignanches, other sclerotic vessels or any other hyperpresorialiferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 1 A; 9 C; 3 G; 2 T; 0 U; 0 Other;

·; Gaps . 0 Score 11.4; DB 1; Length 15; Pred. No. 6.5e+02; 0; Mismatches 1; Indels ; 0 Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative (ò

1221 CCCCATCCTTGCG 1233 ccccArccracc 14

g

AAF49433 standard; DNA; 15 AAF49433; RESULT 1080 AAF49433 SXSXEXEXEXE

(first entry) 30-MAR-2001

IGF-I oligonucleotide #393

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityliasis; IGF binding protein; IGFBP-2; IGFBP9; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keateosis; neoplasia; saclaroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia; kidney disease; neopascular condition; byperplasia; kidney disease; Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or virucide; ophthalmological; keloid Werther GA, Edmondson SR; (MURD-) MURDOCH CHILDRENS RES INST 21-JUN-2000; 2000WO-AU000693. WPI; 2001-041421/05. WO200078341-A1. Homo sapiens. 21-JUN-1999; Wraight CJ, 28-DEC-2000

Example 8; Page 63; 201pp; English.

inflammation.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [167]-1 receptor, IGF binding protein [1678]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, of inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide which can be used to an envention (see AAF45151 and AAF45153- F45161). The method is useful for ameliorating the effects of psoriasis, nothyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood to essets or any other hyperplasia

Sequence 15 BP; 2 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Gaps . 0 0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02; ative 0; Mismatches 1; Indels Query Match
Best Local Similarity 92.3
Matches 12, Conservative

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900 CCTGGTCATTTC 912 1 CCTGGTCATCTTC 13 ò 음

1081

B. AAF49841 standard; DNA; 15 (first entry) 30-MAR-2001 AAF49841;

IGF-I oligonucleotide #801.

Antisense therapy, antiproliferative, antiinflammatory; antipsoriatic, cytostatic, dermatological; cardiant, virucide, ophthalmological; keloid; skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF IGF biding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;

Edmondson SR;

Werther GA,

99US-0140345P.

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(MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                21-JUN-2000; 2000WO-AU000693.
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                                                 WO200078341-A1.
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     Homo sapiens.
                                                                                                                                                                                                  21-JUN-1999;
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                                                                                                   28-DEC-2000
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AAF45601/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
hyperneovascular condition; hyperplasia; kidney disease;
neovascular condition of the retina; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 4 A; 6 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                               Wraight CJ, Werther GA, Edmondson SR;
                                                                                                                                                                                                                                                                                                                                             (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 8; Page 66; 201pp; English.
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                                                                                                                                                                                                                                            21-JUN-2000; 2000WO-AU000693
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                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-041421/05.
                                                                                                                                             WO200078341-A1.
                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                           21-JUN-1999;
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                                                                                                                                                                                             28-DEC-2000
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NAMES OF STREET 
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an article antisense oligomucleotide, (for Insulin-like Growth Pactor [167]-1 receptor, 1GF binding protein [16FB]-2 or 1GFBB3), which is capable of inhibiting or reducing growth factor mediated cell proliferation.

Continuation and/or other disorders. The present sequence is an inflormation and/or other disorders. The present sequence is an oligomucleotide which can be used to design the antisense oligomucleotide is useful for ameliorating the effects of psoriasis, of physis, pityriasis, ruba, pilaris, perborrhoea, keloids, keratosis, nephasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperplasia
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 4 A; 8 C; 1 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                    Example 7; Page 53; 201pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-MAR-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.55
Best Local Similarity 92.33
Matches 12, Conservative
                                                                                                                                  inflammation.
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99US-0140345P.

21-JUN-1999;

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Tue Mar

schultz451-1.rng

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an anticarse alignancieride, (for Insulin-like Growth Factor [167]-1 receptor, 1GF binding protein [16FB]-2 or 1GFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be useful for ameliorating the effects of psoriasis, 154511. The method is useful for ameliorating the effects of psoriasis, cithiyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, the sease, kidney disease, hyperplasia
                                                                                                                                                                                                                                          Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 1 A; 5 C; 8 G; 1 T; 0 U; 0 Other;
                                                                                                                                                            Edmondson SR;
                                                                                                                                                                                                                                                                                                                                              Example 6; Page 36; 201pp; English.
                                                                                                                       (MURD-) MURDOCH CHILDRENS RES INST.
                                       21-JUN-2000; 2000WO-AU000693
                                                                                99US-0140345P
                                                                                                                                                              Werther GA,
                                                                                                                                                                                                     WPI; 2001-041421/05
                                                                                                                                                                                                                                                                                                         inflammation.
                                                                                21-JUN-1999;
                                                                                                                                                            Wraight CJ,
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0; Gaps
Query Match

0.5%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 6.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
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1049 AGCCCCTGGCCC 1061

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13 Addecerredeced 1

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IGFBP3 oligonucleotide #55.
                                 AAF46635 standard; DNA; 15
                                                                                                      30-MAR-2001 (first entry)
                                                                     AAF46635;
RESULT 1084
                  AAF46635
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Antisense therapy, antiproliferative, antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; vitucide; ophthalmological, teloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

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Homo sapiens.
                    28-DEC-2000.
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21-JUN-2000; 2000WO-AU000693

MURD-) MURDOCH CHILDRENS RES INST

99US-0140345F.

21-JUN-1999;

21-JUN-2000; 2000WO-AU000693.

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The present invention relates to a method for ameliorating the effects of artisense oligonucleotide, (for Invalin-like Growth Factor [IGF] receptor, IGF binding protein [IGFSP] -2 or IGFRPB), which is capable inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the artisense oligonucleotides of the present invention (see AAF$151 and AAF$153 - P45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                       Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis, neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis, xidney disease; neoblasis, schoolition; hyperplasis, xidney disease;
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 1 A; 9 C; 3 G; 2 T; 0 U; 0 Other;
                                                                    Edmondson SR;
                               (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                    Example 7; Page 44; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAF49430 standard; DNA; 15 BP
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                                                                    GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 92.3
hes 12; Conservative
                                                                    Werther
                                                                                                     WPI; 2001-041421/05.
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                                                                    Wraight CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAF49430;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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Tue Mar

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliotrating the effects of psoriasis, ichthyosis, pityriasis, ruba, pliaris, serborrhoea, Keloids, Keratosis, ineoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, hidney disease, hyperproliferation of the inside of blood Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or Edmondson SR; Example 8; Page 63; 201pp; English. Werther GA, WPI; 2001-041421/05. CJ, Wraight

0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02; ative 0; Mismatches 1; Indels 899 CCCTGGTCATTTT 911 12; Conservative Local Similarity Query Match Best Loca Matches

Seguence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

vessels or any other hyperplasia

0; Gaps

3 cécrégréarent 15

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AAF45598 standard; DNA; 15 BP RESULT 1086 AAF45598/

IGFBP2 oligonucleotide #437. (first entry) 30-MAR-2001

AAF45598;

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF1-; pttyrisals; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; necohation of the retina; ss.

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WO200078341-A1.

28-DEC-2000,

21-JUN-2000; 2000WO-AU000693

99US-0140345P. 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05

ö The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF].

receptor, IGF binding protein [IGFBP]-2 or IGFBPB], which is capable of inhibiting or reducing growth factor mediated cell proliferation, fiftlammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAPA5151 and AAPA5153-P45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborthoea, keloids, Keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a merior skin, growth factor-mediated malignancies, other sclerotic disease, hyperproliferation of the inside of blood Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antieense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation. Gaps .; Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels Sequence 15 BP; 1 A; 5 C; 8 G; 1 T; 0 U; 0 Other; Example 6; Page 36; 201pp; English vessels or any other hyperplasia 1050 GCCCTGGCCCCA 1062 15 GCCCTGGCCGCA 3 ð 8

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor. I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scaleroderma; wart; skin cancer; sclerotic disease; hyperaecowascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease; IGF-I oligonucleotide #3597.

AAF52637 standard; DNA; 15

RESULT 1087

30-MAR-2001 (first entry)

AAF52637;

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

99US-0140345P 21-JUN-1999; Wraight CJ, Werther GA, Edmondson SR;

(MURD-) MURDOCH CHILDRENS RES INST.

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV'(ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

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skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [167]-1 receptor, 1GF binding protein [168]-2 or 1GFBP3], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45133-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, planis, serborrhoea, keloids, keratosis, neoplasias, scleoder, warrs, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic vascals or any other hyperprioliferation of the inside of blood
                                                                                  The present invention relates to a method for ameliorating the effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 4 A; 2 C; 5 G; 4 T; 0 U; 0 Other;
                              Example 8; Page 84; 201pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            vessels or any other hyperplasia
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Gaps
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Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
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AAF47947 standard; DNA; 15 BP (first entry) 30-MAR-2001 AAF47947; RESULT 1088 AAF47947 CXSXXBXBXBXBXBXBXBXBXBXBXBXBXBXBXBXCX

IGFBP3 oligonucleotide #1367.

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, Keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis, IGF binding protein, IGFBP-2; 1GFBP3; inflammation, psoriasis, pilaris, growth factor mediated cell proliferation, ichthyosis, serborrhoea, ruba, kearcosis, neophasia, scleroderma, wart; skin cancer; sclerotic disease, hyperneovascular condition, hyperplama, kidney disease, neovascular condition, hyperplama; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000,

21-JUN-2000; 2000WO-AU000693

99US-0140345P.

21-JUN-1999;

MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering V (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 53; 201pp; English.

The present invention relates to a method for ameliorating the effects of

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akin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor. Ide binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense and oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, inchnyosis, pityriasis, ruba, pliaris, serbornhoea, keloids, keratosis, neoplasiss, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, baisin or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's disease and rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human, TNFRSF11B; osteoclastogenesis inhibitory factor; single nucleotide polymorphism; SNP; osteoclast recruitment; osteoclast recruitment; osteoclast function; osteoporosis; metastatic bone disease; Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO;
                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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O.5%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 6.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 2 A; 10 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human INFRSF11B gene ASO probe, SEQ ID NO: 109.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  allele-specific oligonucleotide; probe; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1089
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schultz451-1.rng

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Gaps

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Mismatches

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence is that of the top strand of a double-stranded oligonucleotide probe corresponding to GRR of the FogRI gene. The probe was used in electrophoretic mobility shift assay of HepGZ cells that had been transfected with recombinant variants of the human interleukin 10 receptor alpha subunit (IL-10RA) and control. A single nucleotide in polymorphism has been discovered in the IL-10RA angle nucleotide in polymorphism has been discovered in the IL-10RA angle nucleotide and Arg. The invention provides variant human IL-10RA polypeptides and nucleic acids encoding them. The variants have an amino acid substitution at position Gly31 and/or Seri59 or from position Leu62 of the standard in-10RA sequence (see AAB82983). They display at least 3-fold modified, are useful in preparing antibodies, agonists and antagonists useful for diagnosing or treating various IL-10 or receptor-related medical conditions, e.g. cronn's disease, inflammatory bowel disease, ulcerative collits, autoimmune conditions such as systemic lupus erythematosus and rheumatoid arthritis, septic and toxic shock, and infection
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New mammalian interleukin 10 receptor variants, useful for screening agonists and antagonists of the IL-10 receptor ligands or for producing reagents for diagnosing or treating e.g. autoimmune conditions, or septic
                                                                    Gaps
                                                                                                                                                                                                                                                                                                      FcgR1; interleukin 10 receptor; IL-10RA; human; Crohn's disease; infilammarcry bowel disease; ulcerative colitis; autoimmune disease; systemic lupus erythematcsus; rheumatoid arthritis; septic shock; toxic shock; infection; diagnosis; therapy; probe; ss.
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0
                                     0.5%; Score 11.4; DB 1; Length 15;
llarity 92.3%; Pred. No. 6.5e+02;
Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seguence 15 BP; 6 A; 3 C; 2 G; 4 T; 0 U; 0 Other;
           Sequence 15 BP; 7 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                             FcgR1 gene GRR top strand oligonucleotide probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 25; 58pp; English.
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                                                                                                                                                                                           AAH27026 standard; DNA; 15
                                                                                             906 CATTITITIGET 918
                                                                                                                                                                                                                                                   (first entry)
                                                                                                                        15 CATTTACTTTGGT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gasche C, Zakeri SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-638950/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GASC/) GASCHE C.
(ZAKE/) ZAKERI S M.
                                                    Local Similarity
les 12; Conser
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                                                                                                                                                                                                                                                   21-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
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                                        Query Match
                                                                                                                                                                  RESULT 1090
                                                                 Matches
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Length 15;

Score 11.4; DB 1; Pred. No. 6.5e+02;

0.5%;

Best Local Similarity

Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel oligonucleotide primers for amplification and detection of superoxide dismutase target sequences found in Campylobacter jejuni and Campylobacter coli.
                                                                                                                                                                                                                                                                                                                                         Organism identification, superoxide dismutase, sodB; acute diarrhoea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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Pred. No. 6.5e+02;
0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                             C jejuni/ E coli detection PCR primer BR42.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human IL4Ralpha gene probe #24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВЪ.
                                                                                                                                                        BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-FEB-2000; 2000US-00503804.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-00289747.
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Best Local Similarity 92.3%;
Matches 12; Conservative
995 TITGIGGRAAIC 1007
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                                                                                                                                                        AAC67086 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAF69384 standard; DNA; 15
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                                           15 TITCIGGGAATC
                                                                                                                                                                                                                                                                                                                                                                 probe; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                          Campylobacter jejuni.
Escherichia coli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-101735/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-APR-1999;
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                                                                                                                                                                                                      AAC67086;
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Page 514

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Tue Mar

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The present invention relates to polymorphisms of the human interleukin 4 receptor-alpha gene (IL4R-alpha; see AAF5718 for the reference sequence). Polymucleotides comprising polymorphic gene variants are useful for therapeutic purposes. For example, where a patient may benefit from expression of a particular IL4Ralpha protein isoform, an expression of a particular IL4Ralpha protein isoform, an expression destrable to decrease or block expression of a particular IL4Ralpha isogene, which may be done by turning off by transforming a targeted organ, tissue or cell population with an expression vector that expresses high levels of untranslatable mRMA for the isogene. Specific therapeutics identified by these methods may be useful for allergic diseases. The present sequence is a probe for human IL4R-alpha
                                                                                                                                                                                                                                                                                                                                                                         New isolated polynucleotide useful for the identification of therapeutics in allergic diseases is new.
interleukin 4 receptor-alpha; IL4R-alpha;
                                                                                                                                                                                                                                                                                   Duda A, Nandabalan K, Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence 15 BP; 5 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 15; Page 42; 188pp; English
                                                                                                                                                                                                                                             (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                  13-JUL-2000; 2000WO-US019094.
                                                                                                                                                                                                         99US-0143435P.
Polymorphism; human; interle
allergic disease; probe; ss
                                                                                                                                                                                                                                                                                 Chew A, Denton RR,
Windemuth AK;
                                                                                                                                                                                                                                                                                                                                         WPI; 2001-103078/11.
                                                                                          WO200104270-A1
                                                        Homo sapiens
                                                                                                                                                                                                       13-JUL-1999;
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                                  Gaps
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Score 11.4; DB 1; Length 15;
Pred. No. 6.5e+02;
0; Mismatches 1; Indels
 Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                900 CCTGGTCATTTTC 912
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Solute carrier family 6 neurotransmiter transporter; sectonin 4; SLC6A4; genotyping; allele specific oligonucleotide; ss. Human SLC6A4 allele-specific oligonucleotide primer #20 ,900/c AAF73900 standard; DNA; 15 BP. (first entry) 15 ccedercarrire 3 30-APR-2001 AAF73900; Db

(GENA-) GENAISSANCE PHARM INC

99US-0146290P

29-JUL-1999;

31-JUL-2000; 2000WO-US020638

WO200109161-A1.

08-FEB-2001

The present invention relates to a polymorphic variant of a reference sequence for the solute carrier family 6 neurotransmitter transporter, serotronin member 4 (SLC6A4) gene or a fragment of it or a sequence complementary to the first sequence. The invention is used in producing recombinant organism that can be used to express SLC6A4 for protein Claim 12; Page 21; 152pp; English.

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                                                                                                                                                                          The present invention relates to a polymorphic variant of a reference sequence for the solute carrier family 6 neurotransmitter transporter, serocutin member 4 (SLC6A4) gene or a fragment of it or a sequence complementary to the first sequence. The invention is used in producing a recombinant organism that can be used to express SLC6A4 for protein structure analysis and binding studies. A composition comprising a genotyping oligonucleotide is used to detect a polymorphism in the SLC6A4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Solute carrier family 6 neurotransmiter transporter; sectonin 4; SLC6A4; genotyping; allele specific oligonuclectide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated polynucleotide comprising a polymorphic variant for the solute carrier family 6 neurotransmitter transporter, serotonin member 4 gene for identifying drugs for treating disorders related to expression of the protein.
                                                          New isolated polynucleotide comprising a polymorphic variant for the solute carrier family 6 neurotransmitter transporter, serotonin member agene for identifying drugs for treating disorders related to expression of the protein.
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           Stephens JC;
                                                                                                                                                                                                                                                                                                                                          Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human SLC6A4 allele-specific oligonucleotide primer #18.
                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 1 A; 4 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nandabalan K, Sanchis A,
            Sanchis A,
            Nandabalan K,
                                                                                                                                               Claim 12; Page 21; 152pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAF73898 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                       729 CCAGGAGAACAG 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                      13 ccágaágáacag 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-123317/13
              Duda A,
                                      WPI'; 2001-123317/13
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           Denton RR,
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structure analysis and binding studies. A composition comprising a genotyping oligonucleotide is used to detect a polymorphism in the SLC6A4
                                             gene
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Sequence 15 BP; 0 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Gaps ö Score 11.4; DB 1; Length 15; Pred. No. 6.5e+02; 0; Mismatches 1; Indels 0; ch 0.5%; l Similarity 92.3%; 12; Conservative (Query Match Best Local (Matches

729 CCAGGAGAACAG 741

ò g

CCAGAAGAACAG 1 13

ABA03629

ABA03629 standard; DNA; 15 BP

ABA03629;

(first entry) 08-FEB-2002

Human API-112 preferred probe #6.

Human, neuroprotective; nootropic; gene therapy; vaccine; Alzheimer's disease, Alzheimer's Disease-Associated Feature; AF; Alzheimer's Disease-Associated Protein Isoform; API; tryptic digest; Expression Reference Protein Isoform; ERPI; probe; ss.

Homo sapiens.

WO200175454-A2.

11-OCT-2001.

03-APR-2001; 2001WO-US010908,

03-APR-2000; 2000US-0194504P. 28-NOV-2000; 2000US-0253647P.

(OXFO-) OXFORD GLYCOSCIENCES UK LTD. (PFIZ) PFIZER INC.

Friedman DL, Herath HMAC, Kimmel LH, Parekh RB; Rohlff C, Silber BM, Stiger TR, Sunderland PT; , White F, Williams SA; Townsend RR, Durham KL, Potter DM,

WPI; 2001-639384/73.

Screening for Alzheimer's disease in a mammal, by making two-dimensional array of a feature whose relative abundance correlates with disease, and comparing with abundance of the feature in samples of healthy persons.

Claim 84; Page 157; 162pp; English

The invention relates to methods for the screening, diagnosis and prognosis of Alzheimer's disease. The methods involve the detection of Alzheimer's Disease-Associated Features (AFS) and Alzheimer's Disease-Associated Features (AFS) and Alzheimer's Disease-Associated Protein Isoforms (APIS) in cerebrospinal fluid, serum or plasma. The abundance of the AFS and APIS is then normalised to an Expression Reference Protein Isoform (BRP1) in order to determine whether a patient is suffering from, or has a predisposition to, Alzheimer's Disease. The relative abundance of the AFS and APIS correlates with the severity of Alzheimer's Disease. The present sequence is a probe that may be used for screening an API

Seguence 15 BP, 0 A, 7 C, 5 G, 3 T, 0 U, 0 Other,

ö Gaps .. Query Match

0.5%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 6.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels

1098 CACCCTGGGCTTC 1110

ਨੇ 셤 RESULT 1096 AAD2667

AAD26675 standard; DNA; 15

AAD26675;

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(first entry) 26-MAR-2002 Human GPR31 gene polymorphism detecting ASO probe #9.

Human; G-protein coupled receptor 31; GPR31 protein; haplotyping; genotyping; gene therapy; cancer; polymorphism; ASO; probe; allele-specific oligonucleotide; ss.

Homo sapiens.

WO200190124-A2.

29-NOV-2001.

23-MAY-2001; 2001WO-US016908.

23-MAY-2000; 2000US-0206572P.

(GENA-) GENAISSANCE PHARM INC

Messer C; Lee HH, Duda A, Kazemi A, Bieglecki KM,

WPI; 2002-089915/12.

Novel genetic variants of G-protein coupled receptor gene useful in studying expression and function of the protein, and for screening drugs to treat diseases e.g. cancer.

Claim 16; Page 13; 75pp; English.

The invention relates to genetic variants of human G-protein coupled receptor 31 (GPR31) gene. The invention also relates to compositions and methods for hablotyping and/or genotyping the GPR31 gene in an elabolityping and/or genotyping the GPR31 gene in an individual. Polymuoleotides of the invention are useful in studying the expression and function of GPR31, and in expressing GPR31 protein for use constraints and an studying the effect of GPR31, and in expressing GPR31 protein for use and in studying the effect of the variation on the biological activity of GPR31 as well as on the binding affinity of candidate drugs targetting companies to the haplotyping method is useful for improving the efficiency and contained in gene associated with GPR31 activity e.g. cancer. This can also be used by the pharmaceutical research scientist to validate companies associated with GPR31 gene in an individual, which can also be used by the pharmaceutical research scientist to validate condicate drugs, for treating a specific condition drugs or disease condidate drugs, for treating a specific condition drugs or disease condition and also be associated with GPR31 activity. The present sequence is an allele specific oligonucleotide (ASO) probe used to detect human GPR31 gene polymorphisms

Sequence 15 BP; 3 A; 6 C; 2 G; 3 T; 0 U; 1 Other;

. 0 Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 80.0%; Pred. No. 6.5e+02; Matches 12; Conservative 1; Mismatches 2; Indels

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Gaps

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RESULT 1097

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from a cell culture. The method comprises switching cells from a cell culture. The method comprises switching cells from a replicative to a productive or pseudo-sensecent state in one or more cells in the cell culture by transforming cells with a vector expressing a cell cycle inhibitor. The cells can then be maintained in culture for thomer periods of time, allowing protein fraction to be collected from the cell culture. The method is particularly useful for allowing controlled protein biosynthetic productivity of cell lines for commercial and research purposes. This sequence represents a tetracycline operator sequence that can be incorporated into the tetracycline regulated retroviral vectors described in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Increasing the yield of a protein from a cell culture, particularly useful for controlled protein biosynthesis of cell lines for commercial or research purposes, comprises causing a pseudo-senescent state in the cell(s) of the culture.
                                                                                                                                       Tetracycline regulated retroviral vector related tetracycline operator.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention describes a method of increasing the yield of a protein
                                                                                                                                                                                                 pseudo-senescence, cell cycle inhibitor; cell culture,
protein biosynthesis; protein yield; ds, tetracycline operator
                                                                                                                                                                            Tetracycline regulated retroviral vector; INtCtX with Poly A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 4 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bucciarelli T, Levenson V, Primiano T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 6; 46pp; English.
                     ABK12525 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                 21-AUG-2001; 2001WO-US026157.
                                                                                                                                                                                                                                                                                                                                                                                                                     21-AUG-2000; 2000US-0226290P
                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CLON-) CLONEX DEV INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-280932/32.
                                                                                                                                                                                                                                                                                                  WO200216590-A2
                                                                                                                                                                                                                                                            Unidentified
                                                                                               05-JUN-2002
                                                           ABK12525;
ABK12525
ID ABK1
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Novel isolated polymorphic variant polynucleotide of lecithin-cholesterol acyltransferase gene, useful for studying expression and biological function of the gene, and for therapeutic, diagnostic or forensic

purposes

Nandabalan K, Stephens JC,

03-JAN-2001; 2001WO-US000092. 03-JAN-2001; 2001WO-US000092.

WO200253575-A1 Homo sapiens,

(GENA-) GENAISSANCE Chew A, Denton RR, WPI; 2002-557737/59

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The present invention relates to a new polymucleotide comprising a nucleotide sequence which is a polymorphic variant of a reference sequence which is a polymorphic variant of a reference sequence for lecithin-cholsesterol acyltransferase (LCAT). The invention is useful for identifying an association between a trait (preferably a clinical response to drug targeting LCAT) and at least one genotype or haplotype of LCAT gene. The method of the invention has applicability in developing diagnostic tests and therapeutic treatments for Norum disease, fish-eye disease and atherosclerotic cardiovascular disease. The haplotyping methods are useful for studying population diversity, anthropological lineage, the significance of diversity and lineage at the phenotypic level, parentity testing, forensic applications and since the phenotypic level, parentity testing, forensic applications and close sociation between the LCAT genetic variation and a trait such as level of drug response or susceptibility to disease. In addition, the methods for identifying the LCAT haplotypes present in individuals are useful in the development of drugs targeting LCAT haplotypes in a population with a specific disease, e.g. Norum disease, will facilitate the development of drugs targeting the LCAT isoform(s) that are most crequent in that disease, population. The present uncleic acid sequence represents one of a collection (ABEC)+922-ABEC)+519 of allele-specific oligonucleotide (ASO) primers that were used in the invention to detect polymorphisms in the human LCAT gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ASO probe #8 to detect human PI4 gene polymorphisms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 1 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 16; Page 17; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAD25955 standard; DNA; 15 BP.
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Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAD25955;
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IID AAD2
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Gaps ò

0.5%; Score 11.4; DB 1; Length 15; 2.3%; Pred. No. 6.5e+02; v.e 0; Mismatches 1; Indels

92.3%;

0.57 Best Local Similarity 92.37 Matches 12, Conservative

1204 CCCTATCAGGGG 1216

2 CCCTATCAGGGAG 14

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Homo sapiens

Lecithin-cholesterol acyltransferase; LCAT; Norum disease; gene therapy; fish-eye disease; acremaic; population diversity; anthropological lineage; paternity testing; human; polymorphism; allele-specific oligonucleotide; ASO; PCR; primer; sh.

Human LCAT gene polymorphism detection ASO primer #21.

07-OCT-2002 (first entry)

ABK97512;

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ABK97512 standard; DNA; 15

RESULT 1098

ABK97512

homolog 1 polynucleotide, useful the expression and function of the homolog.

Koshy

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Novel isolated human period Drosophila
for therapeutic purposes, for studying
polynucleotide, and for expressing the
                                                                                                                                                                                                                                                                                                                                                             Claim 17; Page 14; 162pp; English.
                                                                                                                                                (GENA-) GENAISSANCE PHARM INC.
                                                                                                      13-SEP-2000; 2000US-0232468P.
                                                           13-SEP-2001; 2001WO-US028780
                                                                                                                                                                                                                                    WPI; 2002-393941/42.
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                      21-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention
                                                                                                                                                                                         Duda A,
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ABL52130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to genotyping protease inhibitor (PI) 4

(kallistatin) gene of an individual, involves determining for the two
copies of the PI4 gene present in the individual, the identity of the
copies of the PI4 gene present in the individual, the identity of the
cucleotide pair at one or more polymorphic sites. PI4 gene is located on
chromosome 14931-922.1 Genotyping is useful for determining if an
chromosome 14931-922.1 Genotyping is useful for determining if an
chromosome 14931-922.1 Genotyping is useful for determining if an
chromosome 14931-922.1 Genotyping is useful for determining if an
completion. Haplotyping is useful for improving the efficacy and
conference at several steps in the discovery and development of drugs
conference that as a candidate agent for treating a
specific condition or disease predicted to be associated with
conference of clinical trials of candidate drugs for
treating a specific condition or disease predicted to be associated with
function of PI4, and in expressing PI4 protein for use in screening for
candidate drugs to treat diseases enlated to PI4 activity. The present
candidate drugs to treat diseases enlated to PI4 activity. The present
candidate drugs to treat diseases enlated to PI4 activity. The present
candidate drugs to treat diseases enlated to PI4 activity. The present
candidate drugs to treat diseases related to PI4 activity. The present
candidate drugs to treat diseases that activity. The present
candidate drugs to treat diseases.
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                                                                                                                                                                                                                                                                                                                    Genotyping protease inhibitor 4 gene of individual for determining haplotype of individual, involves determining identity of nucleotide pair at specific polymorphic sites for two copies of gene.
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/note= "polymorphic site indicated by an ambiguity base"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; period (Drosophila) homologue 1; PER1; polymorphic variant;
polymorphic site; genotyping; haplotyping; circadian rhythm regulation;
single nucleotide polymorphism; SNP; gene; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5%; Score 11.4; DB 1; Length 15;
80.0%; Pred. No. 6.5e+02;
tive 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seguence 15 BP; 5 A; 4 C; 4 G; 1 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                Claim 16; Page 13; 79pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABL52110 standard; DNA; 15 BP.
                                                                                                                                                                                                                                         Sanchis A;
                                                                                                                                                                                             (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                    13-APR-2000; 2000US-0196990P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  785 ACGAGTGTGTCTCCT 799
                                                                                                           13-APR-2001; 2001WO-US012255.
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12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PI4 gene polymorphisms
                                                                                                                                                                                                                                                                                WPI; 2002-075060/10
                                                                                                                                                                                                                                         Choi JY, Koshy B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200222650-A2
                         WO200179227-A2
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                                                                  25-OCT-2001
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Best Local S
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The present invention describes an isolated human period (Drosophila)

homologue 1, (PERI) polymucleotide (I) comprising a sequence which is a

polymorphic variant for a reference sequence (ABL52077) for the PERI gene

or its fragment, or a polymorphic variant of a reference sequence

(ABL52078) for a PERI cDNA or its fragment. The present invention also

describes methods for genotyping and haplotyping the PERI gene of an

individual. (I) is useful in studying the expression and function of

PERI, and in expressing PERI protein for use in screening for candidate

cherapeutic purposes. A recombinant non-human organism transformed or

transfected with (I) can be used for studying expression of the PERI

isogenes in vivo, for in vivo screening and testing of drugs targeted

against PERI protein, and for testing the efficacy of therapeutic agents

and compounds for disorders associated with circadian rhythm regulation.

The present sequence represents an allele specific oligonucleotide primer

for human PERI, which is used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ó
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/note= "polymorphic site indicated by an ambiguity base"
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polymorphic site; genotyping; haplotyping; circadian rhythm regulation;
single nucleotide polymorphism; SNP; gene; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 80.0%; Pred. No. 6.5e+02; Matches 12; Conservative 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 5 A; 3 C; 5 G; 1 T; 0 U; 1 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABL52130 standard; DNA; 15 BP.
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WPI; 2002-519580/55

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The present invention describes an isolated human period (Drosophila) homologue 1, (PER1) polymucleotide (I) comprising a sequence which is a polymorphic variant for a reference sequence (ABL52077) for the PER1 gene or its fragment, or a polymorphic variant of a reference sequence or its fragment, or a polymorphic variant of a reference sequence (ABL52078) for the PER1 gene of an individual. (I) is useful in studying the expression and function of PER1, and in expressing PER1 protein for use in screening for candidate drugs to treat diseases related to PER1 activity. (I) is useful for transfected with (I) can be used for studying expression of the PER1 isogenes in vivo, for in vivo screening and testing of drugs targeted against PER1 protein, and for testing the efficacy of therapeutic agents and compounds for disorders associated with circadian rhythm regulation. The present sequence represents an allele specific oligonucleotide primer for human PER1, which is used in the exemplification of the present
                                                                                                                                                                               Novel isolated human period Drosophila homolog 1 polymucleotide, useful for therapeutic purposes, for studying the expression and function of the polymucleotide, and for expressing the homolog.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Solute carrier family 1; SLC1A4; haplotyping; human; cancer; primer; glutamate/neutral amino acid transporter; neurological disease; PCR; ss; amino acid transporter disorder; single nucleotide polymorphism; SNP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Solute Carrier Family 1 (SLC1A4) allele-specific oligonucleotide #62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.5%; Score 11.4; DB 1; Length 15; 80.0%; Pred. No. 6.5e+02; Live 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 3 A; 7 C; 2 G; 2 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                            Claim 17; Page 15; 162pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1245 CTCCGACCCCATCCC 1259
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                                   13-SEP-2000; 2000US-0232468P.
13-SEP-2001; 2001WO-US028780
                                                                                                         Duda A, Kliem SE, Koshy B;
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hes 12; Conservative
                                                                       (CENA-) GENAISSANCE
                                                                                                                                               WPI; 2002-393941/42.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention
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The invention relates to an isolated polymucleotide (I) comprising a first nucleotide sequence which comprises solute carrier family 1 (II) and an isolated polypeptide (III) comprising an amino acid sequence (CI) and an isolated polypeptide (III) comprising an amino acid sequence (VI) and an isolated polypeptide (III) comprising an amino acid sequence which is a polymorphic variant of a reference sequence for SLCIA4 gene of an individual; (2) predicting a haplotype pair for SLCIA4 gene of an individual; (2) predicting a haplotype pair for SLCIA4 gene of an individual; (2) predicting a haplotype pair for SLCIA4 gene of an individual; (3) identifying an association between a trait and at least one haplotype or haplotype pair of SLCIA4 gene. (III) Is useful in screening for drugs targeting (III) that are useful for treating cancer, neurological diseases and amino acid transporter discorders. The methods are useful for improving the efficiency and reliability of several steps in the discovery and development of drugs for treating covered by the pharmaceutical research scientist to validate SLCIA4 as a condition or disease predicted condidate target for treating a specific condition or disease predicted condidate target for treating a specific condition of disease sesociated with SLCIA4 activity, e.g. cancer, neurological diseases conditions are also useful for screening compounds targeting SLCIA4. Anti-SLCIA4 antibody is useful in diagnostic, prognesic and therapeutic methods. ABK95761-ABK95807 represent SLCIA4 and related PCR primers used to identify single nucleotide polymorphisms condition of the gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SCYA24; human; small inducible cytokine; isogene; antiasthmatic; asthma; gene therapy; respiratory inflammatory disease; polymorphism; primer; ss
                             Novel genetic variants of Solute Carrier Family 1 (Glutamate/Neutral Amino Acid Transporter), Member 4 isogenes, for improving efficiency and reliability in drug development for treating cancers.
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Pred. No. 6.5e+02;
1; Mismatches. 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 5 A; 5 C; 1 G; 3 T; 0 U; 1 Other;
                                                                                                              Claim 15; Page 16; 139pp; English.
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Best Local Similarity 80.0°
Matches 12, Conservative
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ABL57627/
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Gaps

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Sausker EA;

Bieglecki KM, Kazemi A, Russo DP,

useful for inhibiting angiogenesis associated with solid tumour growth,

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                                                                                                      The invention relates to a novel isolated polynucleotide comprising a small inducible cytokine subfamily A (cys-cys), member 24 (SCYA24) isogene. The polypeptide of the invention has antiasthmatic activity. The polynucleotide may have a use in gene therapy. The polynucleotide and polynucleotide are useful in the the development of drugs for treating diseases associated with SCYA24 activity, e.g. respiratory inflammatory diseases such as asthma. Allele-specific oligonucleotide (ASO) primers used for detecting polymorphisms in the SCYA24 gene are represented in ABLS7616-ABLS7645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth; tumour metaatasis; precancerous lesion; rheumatoid arthritis; psoriasis; diabetic retinopathy; retinopathy of prematurity; macular degeneration; corneal graft rejection; neovascular glaucoma; retrolental fibroplasia; rubeosis; Osler-Webber Syndrome; myocardial angiogenesis; pladue neovascularisation; telangiectasia; haemophiliac joint; angiofibroma; wound granulation; intestinal adhesion; atherosclerosis; scleroderma; hypertrophic scar.
           New genetic variants of small inducible cytokine subfamily A member 24 gene, useful in studying expression and function of the protein, and for screening drugs to treat diseases such as asthma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Angiogenesis inhibitory oligonucleotide #916.
                                                                           98pp; English
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les 12; Conservative
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                                                                         Claim 16; Page 14;
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The invention relates to inhibiting angiogenesis in a subject, comprising administering at least one antiangiogenic nucleic acid molecule. Also included is a kit comprising a first container housing the antiangiogenic nucleic acids, and instructions for administering them to a subject having a condition characterised by unwanted angiogenesis. The method is

Inhibiting angiogenesis in a subject, involves administering at least one antiangiogenic nucleic acid molecule to the subject.

Claim 2; Page 35; 276pp; English.

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The invention relates to single nucleotide polymorphisms in the gene encoding human intercellular adhesion molecule 2 (ICAM2). A method for haploryping the ICAM2 gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the ICAM2 haplotypes given the specification or whether both copies are defined by a haplotype or in the specification or whether both copies are defined by a haplotype or pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair of the ICAM2 gene can be trait and a haplotype or haplotype pair of the haplotype or haplotype pair in a reference population, where a higher haplotype or haplotype pair. ICAM2 and its corresponding DNA are used for studying the expression and function of ICAM2, for use in screening
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              tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis, diabetic retinopathy, retinopathy of prematurity, macular degeneration, corneal graft rejection, neovascular glaucoma, retrolental fibroplasia, rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque neovascularisation, telangiectasia, haemophiliac joints, angiofibroma, hypertrophic scars. The present sequence is an antiangiogenic nucleic acid of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel polymucleotide containing polymorphisms in intercellular adhesion molecule 2 gene, useful in developing drugs for treating human immunodeficiency virus infection and inflammatory diseases.
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                                                                                                                                                                                              Sequence 15 BP; 3 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                  1019 AAGAGGGGGAGCT 1031
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Pest Local 2; Conservative
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schultz451-1.rng

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The invention relates to a method of genotyping bovine for improved milk production traits which comprises determining the diacylglycerol acyltransferase (DGATI) genotypic state of the bovine, wherein the DGATI gene and polymorphisms have been found to be associated with such improved milk production traits. The method is useful for selecting a bovine having a desired DGATI genotypic state. It is also useful for the identification and selection of a bovine having one of the polymorphisms in its DGATI gene from selected bovine which is useful for making a dairy product provides a beneficial health effect. An antibody to the protein having DGATI activity is useful for inhibiting the activity of bovine DGATI in a lactating bovine so as to modulate milk
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for candidate drugs to treat diseases related to ICAM2 activity, such as HIV infection and inflammatory diseases. The sequences are also useful for studying the effect of variation on the biological activity of ICAM2 as well as on the binding affinity of candidate drugs targeting ICAM2. Sequences AAS05362-AAS05417 and AAS05419-AAS0542 represent allelespecific oligonucleotide probes, sequencing primers, PCR primers and CDNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bovine DGAT1 gene polymorphic region amplifying primer, SNP4_HEX.
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80.0%; Pred. No. 6.5e+02;
ative 1; Mismatches 2; Indels
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Spelman RJ;
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2000NZ-00508662
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                                                                                                                                                                                                                                                                                                                                                                 AAD40384 standard; DNA; 15
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COPPIETERS W H R.
GRISART B M J.
SNELL R G.
FREID S J.
FORD C A.
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Best Local Similarity 80.0%
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15 AAGGTCAYTGGGGAC
                                                                                                       encoding human ICAM2
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06-DEC-2000;
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The invention comprises the amino acid and coding sequence of the human Nacetylgalactosaminidase (NAGA) alpha protein. The invention specifically comprises novel polymorphic sites identified within the NAGA gene. The NAGA gene is located on chromosome 22q13.2-q13.31, and encodes a lysosomal glycohydrolase that cleaves alpha-Nacetylgalactosaminyl moieties in glycoconjugates. The NAGA DNA and protein sequences of the invention are useful for studying the expression and function of NAGA and for screening candidate drugs to treat diseases related to NAGA activity. The NAGA gene polymorphisms identified in the present invention are useful for haplotyping and genotyping the NAGA gene of an individual. The present DNA sequence represents an N-acetylgalactosaminidase gene allele-
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production and/or milk solids content. DGAT1 nucleic acid and its fragments are useful in the farming industry. They are also useful to generate transgenic animals which are useful to investigate the molecular basis of DGAT1 action and to test a substance for the ability to prevent, slow or enhance DGAT1 activity. The present sequence is a PCR primer used for amplifying bowine DGAT1 gene polymorphic region. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New genetic variants of isolated N-acetylgalactosaminidase (NAGA), Alpha gene, useful for therapeutic purposes, for studying the expression and function of the polynucleotide, and for expressing NAGA protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; PCR; primer; 88; gene therapy; N-acetylgalactosaminidase alpha; chromosome 22q13.2-q13.31; lysosomal glycohydrolase; screening; SNP; NAGA-related disease; single nucleotide polymorphism; haplotyping; NAGA;
                                                                                                                                                                                                                                          Gaps
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Best Local Similarity 92.3
Matches 12, Conservative
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0.5%; Score 11.4; DB 1; Length 15; 80.0%; Pred. No. 6.5e+02;

Query Match Best Local Similarity

Indels 5 Mismatches 1 1158 CGGTGACTGTCCCAA 1172 15 crercacreacecea Matches 12; Conservative ò

RESULT 1108 AAS95599/c

AAS95599 standard; DNA; 15 AAS95599;

(first entry) 14-FEB-2002

Apolipoprotein C-IV allele-specific oligonucleotide #20.

Apolipoprotein C-IV; APOC4; human; antilipaemic; haplotyping; hypertriglyceridaemia; allele-specific oligonucleotide; ASO; ss.

Homo sapiens

40200177127-A2,

.8-OCT-2001

10-APR-2001; 2001WO-US011715.

11-APR-2000; 2000US-0195825P.

(GENA-) GENAISSANCE PHARM INC. (LEEH/) LEE H H.

Koshy B; Thoi JY, Kliem SE,

WPI; 2002-041284/05.

New haplotypes of human apolipoprotein C-IV gene, useful to diagnose and treat diseases associated with its activity such as hypertriglyceridemia.

Claim 16; Page 13; 64pp; English.

The invention relates to haplotyping the apolipoprotein C-IV (APOC4) gene of an individual, comprising determining if the individual has one of the APOC4 haplotypes or haplotype pairs fully defined in the specification. Haplotyping the APOC4 gene of an individual, comprises determining the identity of the nucleotide at two or more polymorphic sites in one copy of the gene. The method also comprises identifying an association between a trait and a haplotype or haplotype pair of the APOC4 gene, comprising comparing the frequency of the haplotype/pair in a population exhibiting the trait with that of a reference population. A higher frequency in the trait population indicates the trait is associated with the haplotype. The polymucleotides and screened compounds are useful for developing. The polymucleotides and screened compounds are useful for developing treatment for diseases associated with APOC4 activity such as hypertriglyceridaemia. AAS955807AAS95634 represent human apolipoprotein C-IV allele-specific oligonucleotides of the invention

Sequence 15 BP; 2 A; 3 C; 7 G; 2 T; 0 U; 1 Other;

Query Match

0.5%; Score 11.4; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 6.5e+02;
Matches 12; Conservative 1; Mismatches 2; Indels

1076 GTCCCACTCCAGGCT 1090

15 GYCCCTCACCAGGCT 1

RESULT 1109 AAS99963 ID AAS99963 XX AC AAS99963

AAS99963 standard; DNA; 15 BP.

AAS99963;

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Gaps

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Human, natriuretic peptide receptor A/guanylate cyclase A, NPR1; ss; atrionatriuretic peptide receptor A, haplotyping; cytostatic; genotyping; haplotype pair; single nucleotide polymorphism; gene therapy; PCR primer; drug screening; hypertension; hypotensive; sequencing primer; probe.

Ношо

16-APR-2001; 2001WO-US012300.

14-APR-2000; 2000US-0197330P.

Nandabalan Choi JY, Kliem SE, Bentivegna SC,

WPI; 2002-066340/09.

Genotyping human natriuretic peptide receptor A/guanylate cyclase g an individual, involves determining identity of nucleotide pair at specific polymorphic sites for two copies of the gene.

The invention relates to single nucleotide polymorphisms in the gene encoding the human natriuretic peptide receptor A/guanylate cyclase A cariomatriuretic peptide receptor A/guanylate cyclase A cariomatriuretic peptide receptor A, or NPRI polypeptide. A method for haplotyping the NPRI gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the NPRI haplotypes given in the specification or whether both copies are defined by a haplotype con in the specification or whether both copies are defined by a haplotype or haplotype pair of the haplotype or haplotype pair of the haplotype or haplotype pair or a population exhibiting the trait with the frequency of the haplotype or haplotype pair. NPRI and its corresponding DNA are used for studying the expression and function of NPRI, for use in screening for candidate drugs targeting NPRI. Sequences AAS99990. AAS99990. ARS99990. ARS99990

Sequence 15 BP; 0 A; 7 C; 5 G; 2 T; 0 U; 1 Other;

.. Query Match
Best Local Similarity 80.0°
Matches 12; Conservative

CCCCGGCSCTGGGCT 15

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Gaps

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RESULT 1110

AAS16734 standard; DNA; 15

BB

AAS16734;

(first entry) 14-FEB-2002

(first entry)

scnurczept-i.rng

12-MAR-2002

Human NPR1 gene allele-specific oligonucleotide probe #5.

WO200179231-A2

25-OCT-2001

(GENA-) GENAISSANCE PHARM INC

gene of

Claim 15; Page 14; 96pp; English.

0.5%; Score 11.4; DB 1; Length 15; 80.0%; Pred. No. 6.5e+02; tive 1; Mismatches 2; Indels

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Gaps

1094 CCCCCACCCTGGGCT 1108

AASI6734/C ID AAS167 XX AC AAS167 XX DT 14-FEB

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Human, ss, APOA4; apolipoprotein A-IV; antiatherosclerotic; cardiant; haplotype; chromosome 11q23-qter; coronary heart disease; obesity; atherosclerosis; PCR primer.
     Human APOA4 allele specific oligonucleotide, ASO, PCR primer #7.
                                                                                                                 (GENA-) GENAISSANCE PHARM INC.
                                                                                       03-APR-2001; 2001WO-US010670.
                                                                                                     JS-APR-2000; 2000US-0194362P.
                                                                                                                                              WPI; 2002-041281/05.
                                                          40200177124-A2.
                                                                                                                                Bentivegna SC,
                                               Homo sapiens
                                                                          18-OCT-2001
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Koshy JY, Kliem SE,

New haplotypes of the human apolipoprotein A-IV gene, useful to diagnose and treat disorders associated with its abnormal expression or function such as coronary artery disease.

Claim 16; Page 15; 71pp; English.

The invention relates to haplotyping the human apolipoprotein A-IV habbah) game of an individual, comprising determining if the individual has one of the APOA4 haplotypes or haplotype pairs fully defined in the specification. Also disclosed are genotyping oligomuclectides (or alleft specific oligomuclectides, ASO) as well as methods for correlating a particular haplotype pair with a trait e.g. obesity, in a population. The APOA4 gene is located on chromosome lag33-qter. The methods of the invention are useful to diagnose and develop treatment for disorders associated with abnormal APOA4 expression or function, for example coronary heart disease and atherosclerosis. The APOA4 isogenes and screened compounds are useful for the treatment of disorders associated with abnormal APOA4 appression or function such as coronary artery disease. The present sequence is an APOA4 allede specific oligonuclectide, ASO, PCR primer used to detect an APOA4 polymorphism

Sequence 15 BP; 3 A; 1 C; 8 G; 2 T; 0 U; 1 Other;

Gaps ö Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels ò

AAS95555 standard; DNA; 15 BP

AAS95555;

(first entry) 14-FEB-2002

Human IL8RB gene allele-specific oligonucleotide sequencing primer #20

Human; interleukin 8 receptor beta; ILBRB; ss; antiinflammatory; probe; haplotypying; haplotype palx; single nucleotide polymorphism; genotyping; gene therapy; drug screening; chronic obstructive pulmonary disease; inflammatory disease; sequencing primer; PCR primer;

Homo sapiens.

WO200179221-A2

12-APR-2001; 2001WO-US011942.

12-APR-2000; 2000US-0196734P.

GENA-) GENAISSANCE

Denton RR, Nandabalan K; Choi JY, Sentivegna SC, Chew A,

WPI; 2002-055250/07.

New polymorphic variants comprising interleukin-8 receptor beta (ILBRB) isogene, useful in expressing ILBRB protein for use in screening for candidate drugs to treat diseases related to ILBRB activity, e.g. inflammatory disorders.

Claim 16; Page 13; 74pp; English.

The invention relates to single nucleotide polymorphisms in the human interleukin 8 receptor beta (ILBRB) gene. A method for haplotyping the Library gene in an individual comprises identifying the nucleotide at one or library gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the ILBRB haplotypes given in the operation or whether both copies are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pair. The large gene can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair of the ILBRB gene can be identified by comparing the frequency of the haplotype pair in a reference population, where a higher haplotype or haplotype pair. ILBRB and its corresponding DNA are used frequency in the trait population indicates the trait is associated with a reference population. ILBRB and its corresponding DNA are used for studying the expression and fleases related to ILBRB activity, such as the sequences are also useful for studying the effect of variation on the biological activity of ILBRB as well as on the binding affinity of candidate drugs to ILBRB as well as on the binding affinity of candidate drugs targeting ILBRB sequences Ass95579 represent allele-specific oligonucleotide probes, sequencing primers and PCR primers used to detect ILBRB gene polymorphisms

Sequence 15 BP; 2 A; 6 C; 2 G; 4 T; 0 U; 1 Other;

Gaps 0; Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels

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1085 CAGGCTTCACCCC 1097

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RESULT 1112

ABK32741 standard; DNA; 15 BP.

ABK32741;

23-APR-2002 (first entry)

Human colorectal and pancreatic cancer SAGE tag #108.

Human; colon cancer; colorectal cancer; pancreatic cancer; SAGB tak serial analysis of gene expression; diagnostic; prognostic; probe; cancer marker; ss.

Homo sapiens

US6333152-B1

25-DEC-2001

schultz451-1.rng

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                                                                                                                                                                                                                                                                                                                 The invention relates to an isolated, purified human nucleic acid (I) that has the same sequence as a mRNA found in humans and is a SAGE (serial analysis of gene expression) tag comprising a single stranded probe containing at least 10 consecutive nucleotides. SAGE tags, are diagnostic and prognostic markers of cancer, especially of the colon and pancreas. ABK31900-ABX32770 represent human colon and pancreatic cancer SAGE tags of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Enzymatic nucleic acid, RNA cleavage, Hepatitis C virus infection, HCV ribozyme, HCV expression, HCV replication; cirrhosis, virucide, liver failure, hepatocellular carcinoma, HCV infection, drug therapy, type I interferon; interferon alpha; interferon beta; cytostatic; ss; interferon consensus interferon; hepatotropic; antinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                   New human nucleic acid containing specific SAGE tags, useful as diagnostic markers for cancer, also derived probes.
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                                                                                                                                                                                                                                                                                 Disclosure; Col 92; 161pp; English
                                                                                                                                     Zhang
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                 98US-00081646
                                                          98US-00081646.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1249 GACCCCATCCCCA 1261
                                                                                                                                     Vogelstein B, Kinzler KW,
                                                                                              UYJO ) UNIV JOHNS HOPKINS
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MCSWIGGEN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J.
(ROBE) ROBERTS B.
(PAVC/) PAVCO P.A.
(MACE/) MACEJACK D.
                                                                                                                                                                              WPI; 2002-153821/20.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unidentified
                 20-MAY-1998;
                                                          20-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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HAX BX X B X B X B X C B

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The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The persist or nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the aubstrate sequences defined in the specification. The HCV ribozymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or replication of context and the reaction of the ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, specially cincarferon alpha, beta or gamma or consensus interferon. The present sequence represents a RNA sequence of unknown function. Note: The present context and the specification. The complete sequence data but is not mentioned elsewhere in the sequence data but is not mentioned elsewhere in context and the complete sequence data for this patent was obtained in electronic format directly from the USPTO web site at the sequence of sequence data for this patent was consensed the sequence data for this patent was sequence and sequence data for this patent was consensed the sequenc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New protocadherin 2 (PCDH2) polymorphic variants and encoding genes, useful in expressing PCDH2 protein for screening candidate drugs to treat diseases related to PCDH2 activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; PCDH2; protocadherin 2; haplotyping; polymorphic variant; SNP, single nucleotide polymorphism; cytostatic; cancer; chromosome 5q31; allele-specific oligonucleotide; ASO; PCR primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.5%; Score 11.4; DB 1; Length 15; 76.9%; Pred. No. 6.5e+02; ative 2; Mismatches 1; Indels
cirrhosis, liver failure or hepatocellular carcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seguence 15 BP; 5 A; 6 C; 2 G; 0 T; 2 U; 0 Other;
                                                                  Disclosure; SEQ ID NO 1537; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human PCDH2 ASO PCR primer SEQ ID NO 53.
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Best Local Similarity 76.9
Matches 10, Conservative
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 Tue Mar
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protein for use in screening for candidate drugs to treat diseases such as cancer, related to PCDH2 activity, in studying the effect of the variation on the biological activity of PCDH2 and the binding affinity of candidate drugs targeting PCDH2. The haplotyping methods are useful in validating PCDH2 as a candidate target for treating a specific condition or disease predicted to be associated with PCDH2 activity or in the design of clinical trials of candidate drugs for treating a specific condition or disease associated with PCDH2 activity. The present sequence is that of a PCDH2 allele-specific oligonucleotide (ASO) PCR primer of
studying the expression and function of PCDH2, in expressing PCDH2
                                                                                                                                                                                                                                                                                                              the invention
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Sequence 15 BP; 3 A; 8 C; 1 G; 2 T; 0 U; 1 Other;

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                                                  Gaps
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Ouery Match 0.5%; Score 11.4; DB 1; Length 15; Best-Local Similarity 80.0%; Pred. No. 6.5e+02; Matches 12; Conservative 1; Mismatches 2; Indels
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1247 CCGACCCCATCCCCA 1261 à

1 cctacccargccsa 15

RESULT 1115 ABL36303

ABL36303 standard; DNA; 15 BP.

ABL36303;

(first entry) 22-APR-2002 Human lysosomal acid phosphatase 2 (ACP2) allele-specific probe 5.

Human; ss; lysosomal acid phosphatase 2; ACP2; gene; chromosome 11; lysosome-specific enzyme; orthophosphoric monoester hydrolysis; hadgkin's disease; HD; acid phosphatase deficiency; novel polymorphic site; ACP2 haplotype; ACP2 genotype; polymorphism; transgenic animal; primer; probe; primer-extension oligonucleotide; SNP; single nucleotide polymorphism.

Homo sapiens.

MO200194362-A2.

13-DEC-2001

07-JUN-2001; 2001WO-US018457.

07-JUN-2000; 2000US-0210047P.

(GENA-) GENAISSANCE PHARM INC

Tanguay DA; Messer C, Kliem SE,

WPI; 2002-154563/20

Novel genetic variants of acid phosphatase 2, lysosomal polypeptide gene useful in studying expression and function of the protein, and for screening drugs to treat diseases e.g. Hodgkin's disease. Claim 17; Page 14; 109pp; English.

The invention comprises the human lysosomal acid phosphatase 2 (ACP2) nucleic acid and protein sequences. Specifically, the invention relates to the discovery of 22 novel polymorphic sites within the APC2 gene. The invention also comprises methods for haplotyping and genotyping the ACP2 gene in an individual. The ACP2 gene (located on chromosome 11) encodes a lysosomal-specific enzyme that caralyses the hydrolysis of orthophosphoric monoesters to alcohol and phosphate. The ACP2 gene and protein are pharmaceutically important in the treatment of Hodgkin's protein are pharmaceutically important in the treatment ACP2 gene and polymorphisms of the invention are useful in haplotyping the ACP2 gene. ACP2 haplotyping is useful in validating ACP2 as a target (and designing

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disease and acid phospharase deficiency). The ACP2 gene polymorphisms are useful for ACP2 genetyping, which can also be used to develop diagnostic tests and therapeutic treatments. The ACP2 protein and mucleic acids of the invention are useful in the production of a transgenic animal which expresses ACP2 protein. The ACP2 nucleic acids of the invention are useful in the production of a transgenic animal which useful in the production of allele-specific oligonucleotides designed to genotype each of the ACP2 polymorphisms. Nucleic acids ABL36299-ABL36320 represent claimed ACP2 allele-specific probes. Nucleic acids ABL36321-acids ABL3644 represent claimed ACP2 allele-specific PCR primers. Nucleic acids ABL36321-acids ABL36364 represent claimed ACP2 allele-specific PCR primers. Nucleic
                                                                                                                                                                                                                                                                                                                                                         oligonucleotides
             8888888888888888888
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Sequence 15 BP; 6 A; 4 C; 3 G; 1 T; 0 U; 1 Other;

ö Gaps . 0 0.5%; Score 11.4; DB 1; Length 15; 80.0%; Pred. No. 6.5e+02; rive 1; Mismatches 2; Indels Query Match Best Local Similarity 80.05 Marches 12; Conservative

8 g RESULT 1116 ABK81774/c ID ABK817 XX

ABK81774 standard; DNA; 15 BP

ABK81774;

(first entry) 13-AUG-2002 Human CHRMS gene polymorphism detection ASO probe #10.

Human, cholinergic receptor muscarinic 5, CHRMS; genotyping, haplotyping, single nucleotide polymorphism; SNP; allele-specific oligonucleotide; ASO; probe; ss

Homo sapiens.

WO200232924-A2.

25-APR-2002

11-OCT-2001; 2001WO-US032022.

(GENA-) GENAISSANCE PHARM INC 19-OCT-2000; 2000WO-US029071.

Denton RR, Nandabalan K; Choi JY, Bieglecki KM, Chew A, Cl Sausker EA, Stephens JC;

WPI; 2002-435523/46.

Novel cholinergic receptor, muscarinic 5 polynucleotide useful therapeutically and in screening for candidate drug to treat diseases related to the receptor activity.

Claim 14; Page 13; 72pp; English.

The present invention relates to a new cholinergic receptor, muscarinic 5 (CHRM5) polynucleotide comprising a sequence which is a polymorphic variant for a reference sequence for the CHRM5 gene or its fragment, or a polymorphic variant of a reference sequence for a CHRM5 cDNA or its fragment. The invention is useful in drug screening assays. The molecules of the invention are useful in studying the expression and function of CHRM5, and in expressing CHRM5 protein for use in screening for candidate drugs to treat diseases related to CHRM5 activity. The methods of the invention are useful in developing diagnostic tests and therapeutic treatments. The method is also useful in the design of clinical trials of candidate drugs for treating specific condition or disease associated with CHRM5 activity and is useful in determining whether an individual

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has one of the haplotypes or one of the haplotype pairs. The invention is useful in a variety of diagnostic and prognostic formats and therapeutic methods. The invention is also useful in genctyping and/or haplotyping the CHRMS gene in an individual. The present nucleic acid sequence trepresents one of a collection of allele-specific oligonucleotide (ASO) probes (ABR81765-ABK81774) that were used in the invention to detect polymorphisms in the human CHRMS gene
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Sequence 15 BP; 5 A; 5 C; 2 G; 2 T; 0 U; 1 Other;

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Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 80.0%; Pred. No. 6.5e+02; Matches 12; Conservative 1; Mismatches 2; Indels
                                                                                                          893 TGTTGCCCCTGGTCA 907
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Gaps ö

> rerreacyerecrea 1 g

ABX76088 standard; DNA; 15 (first entry) 31-MAR-2003 ABX76088; 1117 RESULT 11 ABX76088

Immunostimulatory nucleic acid #99.

ss; immunostimulatory nucleic acid; anaemia; thrombocytopenia; neutropenia; methylated CpG nucleic acid; T-rich nucleic acid; poly-G nucleic acid; phosphorothioate backbone; chemotherapy; radiation treatment; stress; red blood cell; haematopoiesis; synergistic.

Synthetic.

JS2002165178-A1.

07-NOV-2002.

28-JUN-2001; 2001US-00895007

28-JUN-2000; 2000US-021436BP

(SCHE/) SCHETTER C. (BRAT/) BRATZLER R L. (PETE/) PETERSEN D M.

Schetter C, Bratzler RL, Petersen DM;

WPI; 2003-166150/16.

Pharmaceutical composition for treatment of anemia, thrombocytopenia and neutropenia comprises an immunostimulatory nucleic acid and a medicament for the respective disease.

Claim 18; Page 9; 27pp; English.

The invention discloses a pharmaceutical composition comprising an immunostimulatory nucleic acid and either an anaemia medicament. It thrombocytopenia medicament or a neutropenia medicament formulated in a carrier. The immunostimulatory nucleic acid can be selected from a methylated CpG nucleic acid, a T-rich nucleic acid, a poly-G nucleic acid and/or a nucleic acid having a phosphorothicate backbone. The and/or a nucleic acid having a phosphorothicate backbone in the compositions can be used for the treatment or prevention of anaemia, thrombocytopenia and neutropenia in a subject preparing to undergo chemotherapy, radiation treatment, and has received at least one dose of chemotherapy or radiation treatment. The treatment is required due to the effect of stress, including chemotherapy, on the formation of red blood cells, haematopoiesis. The composition provides a synergistic effect of the permits a lower dose of the medicament to be used, thus providing lower costs associated with using lower doses of the medicament, and reduced chances of inducing side effects. The efficacy of the combination

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The invention relates to a method of prevention or treatment of gastric ulcer comprising administering a nucleic acid to a subject in need for treatment of gastric ulcer. A nucleic acid sample comprising oligonucleotide 2006 was administered to a mouse model by an oral route or a vehicle control. Colonisation of mice by Heliobacter pylori was assessed at time points from 1 day to 1 month after treatment. The ability of the nucleic acid to reduce H. pylori colonisation was assessed. The method is useful for preventing or treating a gastric ulcer on a subject e.g. human or non-human vertebrate animal including dog, rabbit, turkey, chicken, primate, rat and mouse. The method effectively treats or prevents gastric ulcers. The present sequence represents an immunostimulatory nucleic acid for the treatment of gastric ulcers
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is profoundly improved over the use of each of the medicaments alone. The sequences presented in AbX75990-ABX76123 are the immunostimulatory nucleic acids disclosed in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Prevention or treatment of gastric ulcer involves administering nucleic
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Gastric ulcer; ss; immunostimulant; equine gastric ulcer syndrome;
Heliobacter pylori.
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                                                                                                    Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                               Gastric ulcer treatment immunostimulatory nucleic acid #99.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 3 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
                                                                      Sequence 15 BP; 3 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure, Page 14, 45pp, English.
                                                                                                                                                                                                                                                                                                          ACAS8753 standard; DNA; 15 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bratzler RL, Petersen DM;
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                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                 3 ATGAGGGGGAGCT 15
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(PETE/) PETERSEN D M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-370798/35.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                              ACA58753;
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(central nervous system (CNS) and myocardial), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infection. This sequence represents the substrate of a novel enzymatic nucleic acid molecule

Sequence 15 BP; 5 A; 2 C; 5 G; 0 T; 3 U; 0 Other, 8888888

Gaps 0,3 Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 76.9%; Pred. No. 6.5e+02; Matches 10; Conservative 2; Mismatches 1; Indels

Necrosis factor kappa B sub-unit modulating enzyme target #121.

ACA09928 standard; RNA; 15 BP

RESULT 1119 ACA09928 03-JUN-2003 (first entry)

ACA09928;

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1027 GAGCTTGAAGGAA 1039 ઠ

3 GAGCUUGUAGGAA 15 셤

ACC71579 standard; DNA; 15 BP.

ACC71579;

(first entry)

11-JUL-2003

Alzheimer's Disease-associated protein isoform, API, probe,

Nootropic, Neuroprotective, Alzheimer's disease, API; human, Alzheimer's Disease-associated protein isoform; probe; ss.

Homo sapiens.

WO2003028543-A2.

LO-APR-2003

03-OCT-2002; 2002WO-US031642.

03-OCT-2001; 2001US-0326708P.

(PFIZ) PFIZER PROD INC. (OXFO-) OXFORD GLYCOSCIENCES UK LTD.

Durham LK, Friedman DL, Herath HMAC, Kimmel LH, Parekh RB; Potter DM, Rohlff C, Silber BM, Snyder PJ, Soares HD, Stiger TR; Sunderland PT, Townsend RR, White WF, Williams SA;

WPI; 2003-371957/35.

Screening or diagnosing of Alzheimer's disease (AD) determine the stage or severity of AD in a subject, comprises analyzing a test sample of body fluid from the subject by 2-dimensional electrophoresis.

Disclosure, Page 93; 179pp; English

The present invention relates to methods for screening or diagnosing Alzheimer's disease (AD) to determine the stage or severity of AD in a subject, to identify subject at risk of developing AD, or to monitor the effect of therapy administered. The methods comprise analysing a test sample of body fluid by 2-dimensional electrophoresis to generate a 2-dimensional array of AD-associated features (AFs). The method alternatively comprises quantitatively detecting in a sample of body fluid from the subject, one or more AD-associated protein isoforms (APIs, ABRS9710-ABRS9184). The present sequence is a probe, used to illustrate the invention

Sequence 15 BP; 0 A, 7 C; 5 G; 3 T; 0 U; 0 Other;

Gaps ő Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels

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1098 CACCCTGGGCTTC 1110

Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme; cleaver, amberzyme; acancer; REL-A activity; breast cancer; human; lung cancer; prostate cancer; colorectal cancer; brain cancer; ocsophageal cancer; stomach cancer; colorectal cancer; parcatal cancer; head and neck cancer; bladder cancer; melanoma; lymphona; glioma; multidrug resistant cancer; REL-A·specific inhibitor; chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosabhanide; doxonthin; fluorouracil carboplatin; edatrexate; gencitabine; radiation therapy; inflammatory disease; asthma; diabetes; rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia; gene therapy; autofmmune disease; lupus; multiple sclerosis; sespis; transplant/graft rejection; reperfusion inluy; glomerulonephritis; allergic airway inflammatory bowel disease; infection; ss. Stinchcomb DT, Mcswiggen J, Draper KG; 94US-00245466. 94US-00291932. 96US-00777916. 23-MAY-2001; 2001US-00864785. STIN/) STINCHCOMB D MCSW/) MCSWIGGEN J. WPI; 2003-340953/32. US2002177568-A1. 18-MAY-1994; 15-AUG-1994; 23-DEC-1996; Homo sapiens. 07-DEC-1992; 28-NOV-2002

Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.

Claim 3; Page 63; 72pp; English.

The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFRM), where (I) is an inozyme, Zinzwe, G-Cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially MG^2+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or multidurg resistant cancer. The method involves use of other drug therapies such as monoclonal antibodies, REL-A-specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, gencitables are also useful for treating inflammatory disease such as cid molecules are also useful for treating inflammatory disease such as crimatic and molecules are also useful for treating inflammatory disease such as chemotherapy applications, ischnedisciption injury rejection, gene therapy applications, ischaemia/reperfusion injury

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Immunostimulatory nucleic acid, cancer; cancer vaccine; hormone therapy; bone cancer; brain cancer; central nervous system cancer; CNS cancer; connective tissue cancer; oesophageal cancer; eye cancer; Hodgixii's lymphoma; laryux cancer; oral cavity cancer; skin cancer; testicular cancer; allergic response; blood transfusion; infection; ss.
                                                                                                                                                                                                                                                                                                      Treatment of a subject having, or at risk of developing cancer, involves the use of an immunostimulatory nucleic acid having a modified backbone
                                                         Cancer medicament related immunostimulatory nucleic acid #99
                                                                                                                                                                                                                                                                                                                             in combination with a cancer medicament.
                                                                                                                                                                                                                                                                                                                                              Disclosure, Page 7; 32pp; English.
 BP
                                                                                                                                                                                               05-MAR-2001; 2001US-00800266.
                                                                                                                                                                                                                  03-MAR-2000; 2000US-0187214P.
ABX89900 standard; DNA; 15
                                     (first entry)
                                                                                                                                                                                                                                                                                      WPI; 2003-275279/27.
                                                                                                                                                                                                                                    (BRAT/) BRATZLER
(PETE/) PETERSEN
                                                                                                                                                         JS2002156033-A1,
                                                                                                                                                                                                                                                                   Bratzler RL,
                                     30-APR-2003
                                                                                                                                                                             24-OCT-2002.
                   ABX89900;
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The invention describes a method of treating (T1) a subject having cancer involving administering an immunostimulatory nucleic acid (1) having conditions and a cancer medicament (M1) selected from conference describes and a cancer medicament (M1) selected from chemotherapeutic agent, immunotherapeutic agent, cancer vaccine or free of CpG and T-rich motifs. The composition is for the treatment of cancer (e.g. bone cancer, brain and CNS cancer, connective tissue cancer, ossophageal cancer, eye cancer, Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer, and testicular cancer), and for preventing allergic responses in those receiving blood transfusions. It is also infections. The compination of the immunostimulatory nucleic acids and the cancer medicament is synergistic. The combination allows for the administration of lower, sub-therapeutic doses of either compound, but with higher efficacy than would otherwise be achieved using such low doses. The immunostimulatory nucleic acids function by enhancement of anti-body dependent cell cytocoxicity. This mechanism provides long lasting effects of nucleic acids, thus reducing dosing regimens, improving compliance and maintenance therapy, reducing emergency situations and improving quality of life. This sequence represents an immunostimulatory nucleic acid in the method of treating cancer described in the invention

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Sequence 15 BP; 3 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
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0.5%; Score 11.4; DB 1; Length 15; 22.3%; Pred. No. 6.5e+02; ve 0; Mismatches 1; Indels 92.3%; 12; Conservative Local Similarity Query Match Matches

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Gaps ö

3 ATGAGGGGGAGCT 15

ACA92756 standard; DNA; 15 BP.

Immunostimulatory CpG oligonucleotide #99 (first entry) 16-JUL-2003

Immunostimulatory oligonucleotide; CpG; ss; vaccine; virucide; immunostimulant; cycostatic; antibacterial; fungicide; viral shedding; oil-in-water emulsion; viral infection; cancer; brain cancer; central nervous system cancer; by every cancer; contral nervous system cancer; CNS; eye cancer; connective tissue cancer; oseophageal cancer; Hodgkin; slymphoma; larynx cancer; oral cavity cancer; skin cancer; testicular cancer; bacterial infection; meningitis; HIV infection; AIDS; fungal infection;

Synthetic.

WO2003030934-A2.

17-APR-2003.

07-OCT-2002; 2002WO-EP011206.

06-OCT-2001; 2001US-0327734P

(QIAG-) QIAGEN GMBH. (UYSA-) UNIV SASKATCHEWAN.

Babiuk LA, Hecker R;

WPI; 2003-381683/36.

New compositions comprising an immunostimulatory nucleic acid and an oil-in-water emulsion, useful for reducing viral shedding or tissue damage upon vaccination, or for inducing an immune response against infectious diseases

Claim 34; Page 34; 68pp; English.

The invention relates to a composition comprising an immunostimulatory nucleic acid (especially a CpG dinucleotide containing oligonucleotide) and an oil-in-water emulaion. Also included are reducing viral shedding in a non-human animal (by administering to a non-human animal infected with a virus or at risk of viral infection, an immunostimulatory nucleic acid and an oil-in-water emulaion), reducing tissue damage and poon or vaccination of a subject by administering to a subject by an invasive content issue damage arising from the adjuvanted vaccine, where the content is adjuvanted with an oil-in-water emulsion), inducing an immune vaccine; is adjuvanted with an oil-in-water emulsion in difference of vaccine; by administering to a subject an oil-in-water emulsion and a cpG oligonucleotide to produce the immune response) and reducing a dosage of antigen administered to a subject to produce an antigen specific immune response comprising administering to a subject an antigen in a subcomposition is useful for reducing viral shedding in a non-human animal infectious diseases, for reducing viral shedding in a non-human response.

Composition is useful for reducing viral shedding in a non-human composition with a virus or at risk of viral infection, for inducing an immune response to treat or prevent infectious diseases, for reducing a dosage of antigen contrain near or preventing cancer, or inducing an immune response to treat or preventing or preventing cancer, or inducing an immune cancer, oseophageal cancer, skin cancer, independence in antigen specific immune response concert, skin cancer, independence is an immune cancer, oral cavity cancer, skin cancer, nearly leading to AIDS) and fungal (e.g. candidasis) infections. The present sequence is an immunostimulatory oligonucleotide

1019 AAGAGGGGGAGCT 1031

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lymphoma (ALCL), adult T cell lymphoma (ATL), angioimmunoblastic lymphadenopathy (AILD)-like T cell lymphoma, HIV associated body cavity based lymphomas, embryonal carcinomas, undifferentiated carcinomas of the rhino-pharynx (e.g. Schmincke's tumour), Castleman's disease, Kaposi's Sarcoma and other T-cell or B-cell lymphomas. The present sequence is human CD30 antibody VH (heavy chain variable domain) CDR (complementarity determining region) DNA
                                                                                                                                                                Sequence 15 BP; 3 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; antibody; CD30; tumour; autoimmune disease; rheumatoid arthritis; systemic lupus erythematosus; systemic sclerosis; Grave's disease; ALCL; satopic dematitis; Hashimoto's thyroiditis; chronic renal failure; ALLD; acute infectious monouncleosis; angioimmunoblastic lymphadenopathy; HIV; Hodgkin's disease; Castleman's disease; Kaposi's sarcoma; lymphoma; ATL; adult T call lymphoma; human immunodeficiency virus; carcinoma; therapy; Wegner's granulomatosis; analpatic large cell lymphoma; charge; heavy chain variable domain; VH; complementarity determining region; CDR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New human monoclonal antibody that binds to human CD30, useful for treating or preventing tumor or autoimmune disease, e.g., rheumatoid
                                                                                                                                Gaps
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'product= "Human CD30 antibody VH CDR peptide"
'note= "No start and stop codon"
                                                                                       Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                 Sequence 15 BP; 3 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                  Human 2H9 CD30 antibody VH CDR1 DNA
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19-AUG-2002; 2002US-0404427P.
06-DEC-2002; 2002US-0431684P.
                                                                                                                                                                                                                                                                                                               ВР
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ID AAD57382/C

AD57382;

X. AAD57382;

XX O6-NOV-2003 (first entry)

XX Human 2H9 CD30 antibody VH CD;

XX Human, antibody; CD30; tumour acpic enfectious monoucleosis; whodgkin's disease; Castleman's will adult T cell lymphoma; human; wedner's granulomatosis; anapky wedner's granuloman anapky wedner's granuloman monoclonal antibody wegner's granuloman monoclonal antibody is useful authoric reating or preventing tumor were also useful for treating virtue cc chuman immunodeficiency virtue cc also useful for treating victual antibody virtue cc also useful for treating victual cc clusting victual cc clusting weeful for treating Hodge
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                                                                                                                                                                                                            ATGAGGGGGGGCT 15
              of the invention
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                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Immunostimulatory, antiinflammatory, dermatological; antipsoriatic; antiulcer; gene therapy, vaccine; non-allergic inflammatory disease; psoriasis; eccema; allergic contact dermatitis; latex dermatitis; inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treating non-allergic inflammatory diseases, such as psoriasis, ecz
allergic contact dermatitis, latex dermatitis or inflammatory bowel
disease by administering an immunostimulatory nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·
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0.5%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 6.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
Query Match 0.5%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immunostimulatory nucleic acid #885.
                                                                                                                                                                                                                                                                                                                                                                                                                       ACH03250 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-MAR-2001; 2001US-0279642P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-MAR-2002; 2002US-00112653.
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                                                                                                                                                           795 CTCCTGTAGTAAC 807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                         14 CTCCAGTAGTAAC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-521815/49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Krieg AM, Berg DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (KRIE/) KRIEG A M. (BERG/) BERG D J.
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HNF-lalpha;

Synthetic.

ACF05803;

RESULT 1125

a

Glazer PM;

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The invention relates to an improved primer discrimination method in allele-specific primer extension (ASPE). The invention also relates to primers useful in ASPE methods, which has in 3' portion an allelespecific nucleotide complementary to allelic variation nucleotide of target nucleic acid and an artificial mismatch nucleotide. The primers are useful for increasing discrimination between primers in ASPE. The ASPE method is useful in detecting a single point mutation as well as insertion and deletion variations. The present sequence is a probe/primer) used to detect variations in human HNP-1 alpha (hepatocyte nuclear factor-1) mutant exon 2. This sequence is used to illustrate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel primer for use in allele-specific primer extension, has in 3' portion an allele-specific nucleotide complementary to allelic variation nucleotide of target nucleic acid and an artificial mismatch nucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ds, allergy, asthma, poly-G nucleic acid; aerosol formulation; hypo-responsive subject; immunostimulatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02; lve 0; Mismatches 1; Indels
                                                        Allele-specific primer extension; ASPE; detection; human; hepatocyte nuclear factor-1; probe; ss.
                  Human HNF-1 alpha mutant exon 2 specific probe #9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 3 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Immunostimulatory nucleic acid #827.
                                                                                                                                                                                                                                                                                                                                       (SMSU ) SAMSUNG ELECTRONICS CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 6; 28pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADB37213 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                              23-NOV-2001; 2001KR-00073291.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-FEB-2001; 2001US-00776479.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-FEB-2000; 2000US-0179991P.
                                                                                                                                                                                                                                                     16-NOV-2002; 2002WO-KR002143.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ilarity 92.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1161 TGACTGTCCCAAC 1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14 recerercease 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               method of the invention
                                                                                                                                                                                                                                                                                                                                                                                  Huh N;
                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-468777/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
ses 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003087848-A1.
                                                                                                                                                                   WO2003044228-A1.
                                                                                                                                                                                                                                                                                                                                                                                  Kim K,
                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-MAY-2003
                                                                                                                                                                                                            30-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADB37213;
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                                                                                                                                                                                                                                                                                                                                                                                  Che J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1127
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention provides single-stranded (ss) DNA molecules that are generated intracellularly and are active in mediated triplex-dependent and/or recombinagenic chromosomal events within the cells and/or the cellular compartments. These oligonucleotides can be produced within the cells by providing a vector or plasmid which generates not only the oligonucleotides in the cells, but also a fusion protein which is both a reverse transcriptase and a restriction enzyme. The ssDNA may be produced directly, or initially as a stem-loop structure, which is then cleaved to yield ssDNA. The triplex forming oligonucleotide can be studying DNA repair, for generating of generating of studying DNA repair, for gene therapy, for generating new strains of transmited animals or plants, and in functional genomics. The present sequence is that of a PCR primer to ss triplex-forming oligonucleotide

CC sequence is that of a PCR primer to ss triplex-forming oligonucleotide

A334 (see ACF05805) or its reverse, and was used to detect ssDNA in mouse EL-10 cells following vector transfection
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inducing a specific change in a target chromosomal nucleic acid molecule by introducing (into a cell) a nucleotide molecule encoding a reverse transcriptase or a RNA to be reverse transcribed into single stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 1 A; 10 C; 2 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                  Iriplex; gene therapy; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 22; 39pp; English.
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AAL60774 standard; DNA; 15 BP.
                                                                                                                            BP.
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                                                                                                                                                                                                                                                         PCR primer to AG34 or rev34
                                                                                                                            ACF05803 standard, DNA, 15
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                      15
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ATGAGGGGGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-533013/50.
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AAL60774;

RESULT 1126

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AAL60774/

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to genotyping/haplotyping the cholinergic receptor, nicotinic, beta-polypeptide 2 (neuronal) (CHRNB2) gene of an individual,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Genotyping cholinergic receptor, nicotinic, beta-polypeptide 2 gene of an individual involves determining for two copies of the gene, the identity of nucleotide pair at polymorphic sites selected from PS1-24.
                                                                                                                                                                                                           The invention relates to a method of treating or preventing allergy or asthma which comprises administering to a subject a poly-G nucleic acid in an aerosol formulation. The methods and compositions of the present invention are useful for diagnosing and/or treating asthma and allergy especially in a hypo-responsive subject. The present sequence represents an immunostimulatory nucleic acid of the invention.
                                                                                                                                 Treating and/or preventing allergy or asthma using an immunostimulatory nucleic acid alone or in combination with an asthma/allergy medicament.
                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human CHRNB2 allele specific oligonucleotide (ASO) probe #13.
                                                                                                                                                                                                                                                                                                                                                         0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02; tive 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 3 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            allele specific oligonucleotide; ASO; probe.
                                                                        Fouron Y;
                                                                                                                                                                                  Disclosure, Page 18; 221pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 15; Page 14; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Koshy B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AASS7216 standard; DNA; 15 BP
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13-JUL-2000; 2000US-0217952P.
                                                                                                                                                                                                                                                                                                                                                                                                                           1019 AAGAGGGGGAGCT 1031
                                                                          Petersen DM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGAGGGGGAGCT 15
                                                                                                                                                                                                                                                                                                                                                                                            12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-626374/72
           BRATZLER R I
PETERSEN D N
FOURON Y.
                                                                                                      WPI; 2003-657977/62
                                                                                                                                                                                                                                                                                                                                                                             Similarity
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                                                                          Bratzler RL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-JAN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAS57216;
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Best Local 9
                            (PETE/)
(FOUR/)
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computative duetrimining to the two cupres of the individual, the identity of the nucleotide pair at one or more the individual, the identity of the nucleotide pair at one or more polymorphic sites selected from FS1-24. Also include are oligonuclectides for performing the method and the mucleotide sequence of the polymorphic variants of CHRNB2. The method is useful for detecting novel CHRNB2.

Co polymorphisms and for determining if an individual has a haplotype or polymorphisms and for determining if an individual has a haplotype or candidate agent for treating a specific condition or disease predicted to be associated with CHRNB2 activity (e.g. a memory disorder, Alzheimer's candidate agent for treating disorder, schizophrenia, attention of disease, epilepsy, (ADNFLE)), and in the design of clinical trials of frontal lobe epilepsy (ADNFLE), and in the design of clinical trials of candidate drugs for treating a specific conditions or disease predicted to be associated with CHRNB2 activity. The method is useful to screen for compounds targeting CHRNB2, the polymorphic mucleic acids are useful in brudying the expression and function of CHRNB2, and in expressing cranated to CHRNB2 activity. The polymorphic mucleic acids are useful in brudying the expression and function of CHRNB2, and in expressing cranated to CHRNB2 activity and are useful for therapeutic purposes. The CHRNB2 gene is located on chromosome 1021. The present sequence is an expensive and in expressing the invertible of the polymorphic ming the method of the invertible of the polymorphic ming the method of the polymorphic ming the method
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense therapy, antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; linsulin-like Growth Factor. I receptor; IGFP-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; kertosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neobascular condition; hyperplasia; kidney disease;
comprising determining for the two copies of the CHRNB2 gene present in
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0.5%; Score 11.4; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 6.5e+02;
Matches 12; Conservative 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 3 A; 8 C; 3 G; 0 T; 0 U; 1 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VPI; 2001-041421/05
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified oligo:nucleotide(s) conjugates to anthraquinone - useful as anti-sense agents for treating and diagnosing diseases.
                                       skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense of the present invention (see AAF45151 and AAF45153-64561). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasis, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor mediated malignancies, other sclerotic disease, kidney disease, hyperpoliferation of the inside of blood vessels or any other hyperplasia
                               The present invention relates to a method for ameliorating the effects of
                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligomer; specificity; pseudonuclectide; anthraquinone; in vitro; in vivo; hybridisation; antisense therapy; stability; diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
"Pseudonucleotide containing anthraquinone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= b
/note= "Pseudonucleotide containing anthraquinone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The sequences given in AAQ42793-802 are oligomers which contain
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0
                                                                                                                                                                                                                           0.5%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                       Sequence 15 BP; 3 A; 5 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                  Pseudonucleotide containing oligomer 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
            Example 8; Page 84; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Table 1; 6pp; English
                                                                                                                                                                                                                                                                                                                                                  BP.
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                                                                                                                                                                                                                                                                        1658 CTGCGAGATCGCC 1670
                                                                                                                                                                                                                                                                                                                                                  AAQ42798 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                      CTGGGAGATCGCC 13
                                                                                                                                                                                                                                         12; Conservative 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   *tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matteucci M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1993-181844/22.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-FEB-1990;
                                                                                                                                                                                                                                                                                                                                                                                             22-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US5214136-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                        AAQ42798;
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                                                                                                                                                                                                                                           Local
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The Ligase Chain Reaction has been improved to increase the "flexibility" or "dynamic range" of each probe set used in the detection of small mutations (single base deletions, insertions and changes, as well as multiple mutations where the size of the mutation is less than about 15$ of, the average probe length). Previously the determination of the genetic constituency of an individual has been time consuming. The invention comprises reacting probes and sample (suspected to contain the target nucleic acid) under hybridising conditions that have been modified - 1. the concentration of monovalent cation (Na+, K+, or NR3H+; R = H or lower alkyl) is 100-200mM; 2. a "hot start" (temp. range 50-95 degree C) may be
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pseudonucleotides which contain anthraquinone. These oligomers were tested for stability in vitro and in vivo, and specificity of hybridisation to complementary DNA and RNA. Hybridisation was increased with respect to DNA and RNA complement in almost all cases. The oligomers which contain two anthraquinone modifications generally show cumulatively enhanced stability as compared to those with only one such residue. These oligomers are useful for therapeutic, esp. antisense therapy, diagnostic
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                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cystic Fibrosis; CF nonsense mutation; improved method; diagnosis; known mutation; Ligase chain reaction; G542X; ss.
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                                                                                                                                                                                                                                                                                                                                                      0.5%; Score 11.4; DB 1; Length 16;
llarity 92.3%; Pred. No. 7.8e+02;
Conservative 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                            Sequence 16 BP; 0 A; 7 C; 0 G; 7 T; 0 U; 2 Other;
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/mod_base= other
/note= "5'-biotin-T"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ72441 standard; DNA; 16 BP.
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                                                                                                                                                                                                                                      research applications
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                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
modified_base
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Gaps

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used, and 3. one of the downstream probes has a mismatch within 5 bases from the 5' end so it is not complementary to the target sequence (The complementary probe is also mismatched). These may be used either on their own or in conjunction. AAQ72439 and AAQ72440 are used to detect the G542X mutation in cystic fibrosis. The remaining probes are selected from AAQ7248, AAQ72441, AAQ72442 and AAQ7243. This invention is also correct P1 field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This sequence shows an intron-exon boundary of the human haemopoietin receptor NR2 gene. Genomic libraries were screened to obtain genomic clones of the NR2 locus. These clones were characterised by mapping with partial endonuclease digestion, and specific probes were used to determine which fragments contained exon sequences. Intron/exon junction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Haemopoietin receptor; new receptor 2; NR2; leptin; human; autoximune disease; nervous system; cerebral palsy; leptins, inervous system; cerebral palsy; tramma induced paralysis; vascular ischaemia; stroke; neuronal tumour; motor neurone disease; Parkinson's disease; Huntington's disease; Alzheimer's disease; multiple sclerosis; peripheral neuropathy; heavy metal; alcohol; toxicity; kidneyl fallure; infectious disease; herpes; rubella; measles; chicken pox; HIV; HILV-1; therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human haemopoietin receptor NR2, and corresponding DNA - used e.g. for treatment of auto-immune diseases.
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                                                                                                                                                                                      Score 11.4; DB 1; Length 16; Pred. No. 7.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human haemopoietin receptor NR2 gene intron-exon junction.
                                                                                                                                                                                                                      1; Indels
                                                                                                                                                     Sequence 16 BP; 2 A; 7 C; 1 G; 6 T; 0 U; 0 Other;
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/note= "3' end of 1.4 kb intron"
                                                                                                                                                                                                                      0; Mismatches
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/note= "5' end of exon"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 11; Page 42; 96pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AMRA-) AMRAD OPERATIONS PTY LTD.
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                                                                                                                                                                                                                                                       1125 TICCACCTICACC 1137
                                                                                                                                                                                  Query Match
Best Local Similarity 92.34
Matches 12; Conservative
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sequences (see AAT64459-86) were determined by sequencing across intron/exon boundaries and confirmed by PCR. MR2 (see also AAM4841) and genetic sequences encoding it (see also AAT6442) can be used in the development of (ant)agonists, therapeutics and diagnostic reagents based
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Haehopoietin receptor; new receptor 2; NR2; leptin; human; autoimmune disease; nervous system; cerebral palsy; autoimmune disease; nervous system; cerebral palsy; neuronal tumour; motor neurone disease; Parkinson's disease; Huntington's disease; Alzheimer's disease; multiple solerosis; peripheral neuropathy; heavy metal; alcohol; toxicity, kidneyl failure; infectious disease; herpes; rubella; measles; chicken pox; HIV; HTLV-1; therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human haemopoietin receptor NR2, and corresponding DNA - used e.g. for
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                                                                                                                                 Match 0.5%; Score 11.4; DB 1; Length 16; Local Similarity 92.3%; Pred. No. 7.8e+02; es 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   Human haemopoietin receptor NR2 gene intron-exon junction.
                                                                                                   Sequence 16 BP; 4 A; 2 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               end of intron"
                                                                   on ligand interaction with the receptor
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/note= "5' end of exon"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 treatment of auto-immune diseases.
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/*tag= ]
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-SEP-1995;
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                                                                                                                                      Query Match
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AAT64472/c
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Matches
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The present invention describes an isolated nuclectide sequence (I) encoding at least a portion of the human alpha-7 neuronal nicotinic encoding at least a portion of the human alpha-7 neuronal nicotinic acetylcholine receptor (alpha7-hnAchR). Also described are: (I) a peptide encoded by (I), (2) a vector comprising (I); (3) a host cell transformed with a vector of (2); (4) a polymucleotide comprising at least 15 nucleotides which hybridises under stringent conditions to at least a portion of (I), (5) a method for detection of a polymucleotide encoding alpha 7-hnAchR. In a biological sample; and (6) a method for amplification of nucleic acid from a sample suspected of containing nucleic acid encoding alpha 7-hnAchR. The primers and probes from the present invention can be used on brain tissue and blood samples of humans suspected of suffering from schizophrenia, small cell lung carcinoma, breast cancer and nicotine-dependent illness. This is particularly useful cor diagnosis of schizophrenia, other illnesses that can be studied/diagnosed are epilepsy (e.g. juvenile myoclonic epilepsy) and prader-Willi and Angelman's syndromes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                             Human; alpha-7 nicotinic receptor; neuronal; hybridisation; probe; alpha-7 neuronal nicotinic acetylcholine receptor; schizophrenia; small cell lung carcinoma; breast cancer; nicotine-dependent illness; epilepsy; juvenile mycolonic epilepsy; Prader-Willi syndrome; Angelman's syndrome; PCR primer; 8s.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human alpha-7 neuronal nicotinic acetylcholine receptor and related polynucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.5%; Score 11.4; DB 1; Length 16; Best Local Similarity 92.3%; Pred. No. 7.8e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                            Human alpha-7 hicotinic receptor PCR primer SEQ ID NO:48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 16 BP; 6 A; 5 C; 3 G; 2 T; 0 U; 0 Other;
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AAA86561 standard; DNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                                                                98WO-US021762.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 ACCCAAACTTCAG 16
                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Leonard S, Freedman R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-288306/24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (LEON/) LEONARD S. (FREE/) FREEDMAN R.
                                                                                                                                                                                                                                                                                                                                                                                                15-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                          23-OCT-1997;
                                                                                                                                                                                                                                          Synthetic.
Homo sapiens
                       15-JUL-1999
                                                                                                                                                                                                                                                                                                         WO9920757-A2
                                                                                                                                                                                                                                                                                                                                                      29-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA86561;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAVI1892-VI1900 are PCR primers used in the identification and isolation of a salt-inducible promoter (SIP) derived from the lactic acid bacterium Lactococcus lactis. Using the SIP, salt can be used as a food-grade inducer in food fermentation processes, e.g. in the production of cheese, dressings, water-containing spreads, sausages, or sour dough
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Salt-inducible promoter - derived from lactic acid bacteria, used for the production of polypeptides in food.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Salt-inducible promoter; lactic acid; food industry; food-grade inducer; fermentation processes; cheese production; PCR primer; ss.
development of (ant)agonists, therapeutics and diagnostic reagents based on ligand interaction with the receptor
                                                                                                                                                          Gaps
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                                                                                                       Query Match 0.5%; Score 11.4; DB 1; Length 16; Best Local Similarity 92.3%; Pred. No. 7.8e+02; Matches 12; Conservative 0; Mismatches 1; Indels
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                                                                 Sequence 16 BP; 2 A; 4 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ledeboer AM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         L. lactis NS3 locus PCR primer NS3-9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 16; 111pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sanders JW, Kok J, Venema G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX56201 standard; DNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                        AAV11898 standard; DNA; 16 BP.
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97EP-00200744.
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                                                                                                                                                                                                  1009 ACACCTGAAAAG 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGACTGACCCAAC 16
                                                                                                                                                                                                                                       14 ACACCTGGAAAAG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UNIL ) UNILEVER NV. (UNIL ) UNILEVER PLC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
Lactococcus lactis.
                                                                                                                                                                                                                                                                                                                                                                                                                                            13-AUG-1998
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13-MAR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                  AAV11898;
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AAX56201
ID AAX5620:
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AC AAX5620:
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AAV11898
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Gaps

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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a cibozyme (I) which cleaves RNA encoding a cytokine involved in the lammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, anticladeborrheic, antidiabetic, antidiabetic, and cophhalmological, cytostatic, antiseborrheic, antidiabetic, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, concerningment of squamous or basal cell carchinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing concerning such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AMB6209 represent sequences used in the cemplification of the present invention
                                                                                                                                                                                     Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KRAB domain, hyperplasia, thyroid, tumor, zinc finger motif; primer; cytostatic, antithyroid; gene therapy; chromosome 19; 19q13; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human thyroid malfunction-associated protein RITA PCR primer #2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 16 BP; 3 A; 2 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rippe V, Meiboom M, Belge G;
                                                                                                                                                                                                                                                                                        Example 1; Page 20; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF88161 standard; DNA; 16 BP.
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99US-0161532P
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                                                                                                                                         WPI; 2001-300427/31.
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                                              (IMMO-) IMMOSOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200127265-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
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26-OCT-1999;
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                                                                                             Robbins JM,
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Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keracolytic; gene therapy; viral wart; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in Representative examples of ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                             New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCNA hairpin/hammerhead ribozyme recognition site SEQ ID NO:4151.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 11.4; DB 1; Length 16; 92.3%; Pred. No. 7.88+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 16 BP; 3 A; 2 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                     Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 16; 109pp; English
                                                                                                                                                                                                                                                                                                                     Barber JR,
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                                                                                                                                                                        99WO-US028772
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       restenosis treatment
                                                                                                                                                                                                                                                                                                                     Tritz R, Welch PJ,
                                                                                                                                                                                                                                                                      (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-412314/35
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Synthetic.
                                                                                                                                                                        06-DEC-1999;
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                            Mammalia
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RESULT 1137

AAH61727

Matches

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Sequence 16 BP; 7 A; 1 C; 2 G; 6 T; 0 U; 0 Other;

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The invention relates to a novel isolated molecule comprising bases 2-8 or 13-16 of 2 16 base pair sequences, or comprising a 1731 base pair sequence, all given in the specification or at 18-ast 95 % identity with the 1731 bp sequence. The mucleic acid molecule is useful in regulating apoptosis in cells and in drug screening. The method is useful in facilitating the induction of apoptosis in cells, in identifying an agent that can facilitate the induction of apoptosis in cells, and in inhibiting the growth of a cancer. This polymucleotide sequence represents a ribozyme binding substrate sequence relating to the
                                                                                                    This invention describes a novel nucleic acid (NI) encoding a polypeptide which comprises a KRAB-domain and/or at least one zinc finger motif. The products of the invention have cytostatic and antithyroid activity and can be used in gene therapy. Nucleic acids, polypeptides, and antibodies of the invention may be used in the diagnosis and/or the therapy of the malfunction of the thyroid and/or hyperlasais of the thyroid and/or thyroid and/or thyroid tumors. They may also be used in the production of medicaments. (NI) can also be used to diagnose thyroid tumors which are located on thromosome 19 at band 19413. This sequence represents a PCR primer used in the isolation of the thyroid malfunction-associated protein, RITA which is described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated nucleic acid molecule useful for regulating apoptosis induction in cells, for inhibiting the growth of cancer in subjects, and for drug screening.
                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                New nucleic acid useful for the diagnosis and treatment of thyroid
                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytostatic, gene therapy, apoptosis, cancer growth inhibition, drug screening, ss.
                                                                                                                                                                                                                                                                                                                                                                                 Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ribozyme substrate binding sequence SEQ ID No 63.
                                                                                                                                                                                                                                                                                                                                            Sequence 16 BP; 2 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                               0.5%; Score 11.4; DB 1; 92.3%; Pred. No. 7.8e+02; rative 0; Mismatches 1;
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                                                                       Example 8; Page 29; 59pp; German.
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Best Local Similarity 92.3,,
Best Local 2; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           817 AGCCTGGAGTGCA 829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14 AGGCTGGAGTGCA 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated nucleic acid molecule useful for regulating apoptosis induction in cells, for inhibiting the growth of cancer in subjects, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
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                                                                                                                                                                                                                                                                                                            Cytostatic, gene therapy, apoptosis, cancer growth inhibition, drug screening, ss.
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Score 11.4; DB 1; Length 16; Pred. No. 7.8e+02;
                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tritz R, Keily B, Habita C, Robbins J, Barber J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 16 BP; 4 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                               Ribozyme substrate binding sequence SEQ ID No 62.
                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; Page 41; 153pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADE14063 standard; DNA; 16 BP.
                                                                                                                                                                               ABT33711 standard; DNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-MAY-2002; 2002WO-US015198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-MAY-2001; 2001US-0290927P.
 Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1275 GTGGGAGGACAGC 1287
                                                                772 TTTCTAAGAGAAA 784
                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 GTGGGAGAACAGC 16
                                                                                               1 rrrcraaadaaa 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (IMMI-) IMMISOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-129308/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for drug screening
                                                                                                                                                                                                                                                                                                                                                                                                WO200292840-A2.
                                                                                                                                                                                                                                                                                                                                                                 Unidentified.
                                                                                                                                                                                                                                                 29-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                              21-NOV-2002.
                                                                                                                                                                                                                ABT33711;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1141
ADE14063/c
ID ADE1406;
                                                                                                                                                  RESULT 1140
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Human, optineurin; ds; ophthalmological; single mucleotide polymorphism; SNP; glaucoma; progressive ocular hypertensive disorder; glaucoma related disorder; motif; repeat element; regulatory region.

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Raymond V, Morissette J,

06-MAR-2002; 2002US-00091281. 06-MAR-2002; 2002US-00091281.

Optineurin promoter motif, repeat element or regulatory region #376.

(first entry)

BP

16

(first entry)

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Human; optineurin; ds; ophthalmological; single nucleotide polymorphism; SNP; glaucoma; progressive ocular hypertensive disorder; glaucoma related disorder; motif; repeat element; regulatory region.
                                   Optineurin promoter motif, repeat element or regulatory region #172
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 92.3%; Score 11.4; DB 1; Length 16; Local Similarity 92.3%; Pred. No. 7.8e+02; es 12; Conservative 0; Mismarchen
                                                                                                                           16-MAR-2002; 2002US-00091281.
                                                                                                                                         06-MAR-2002; 2002US-00091281.
                                                                                                                                                                                    Raymond V, Morissette J,
                                                                                                                                                                       (MORI/) MORISSETTE J.
                                                                                                                                                                                                    WPI; 2003-864168/80,
                                                                                                                                                        SI E.
RAYMOND V.
                                                                                              US2003190617-A1.
                                                                                Homo sapiens
                     29-JAN-2004
                                                                                                             39-OCT-2003.
                                                                                                                                                                                                                                        disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
       ADE14063;
                                                                                                                                                        (SIEE/)
(RAYM/)
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Si E;

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The invention relates to an isolated nucleic acid (NI) comprising at least 20 but not more than 1500 consecutive nucleotides of the optineurin promoter appearing as ADB13890. Also included are the optineurin promoter operably linked to a heterologous nucleic acid, a nucleic acid capable of detecting a single nucleotide polymorphism (SNP) in the optineurin promoter. Spromber, a host cell comprising the promoter operably linked to a chereologous sequence, diagnosing or promoter operably linked to a chereologous sequence, diagnosing or prognosing glaucoma in a sample obtained from a cell or bodily fluid (comprising detecting a polymorphism obtained from a cell or bodily fluid (comprising detecting a polymorphism of the optineurin gene, associated with a glaucoma phenotype), detecting a SNP sequence variation in a sample containing DNA, determining the presence or increased susceptibility to glaucoma or to a progressive ocular hypertenaive concerning in loss of visual field in a patient (or the severity or promoter resulting in loss of visual field in a patient (or the severity complification reaction primers that direct amplification of a selected mucleic acid region containing the variation within the optineurin containing the uncented mucleic acid region containing the variation within the optineurin promoter, and detecting the polymorphism). The invention is used to diagnose and progression or the progression or progression or the polymorphism) of present sequence is an optineurin promoter motif, repeat element or pursual progression or progression or the polymorphism or the invention is used to diagnose and progression promoter motif, repeat element or
New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 16 BP; 2 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                 Claim 11; SEQ ID NO 174; 159pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 outative regulatory region.
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The invention relates to an isolated nucleic acid (NI) comprising at least 20 but not more than 1500 consecutive nucleotides of the optineurin promoter appearing as ADE13890. Also included are the optineurin promoter operably linked to a heterologous nucleic acid, a nucleic acid capable of detecting a single nucleotide polymorphism (SNP) in the optineurin promoter. Promoter operably linked to a single nucleotide polymorphism (SNP) in the optineurin of percentage as a single containing the promoter region of the optineurin gene, associated with a sample ontaining optineurin gene, associated with a glaucoma or the promoter response or increased sample containing by detecting the presence of an optineurin promoter sequence variation in a sample containing by determining the presence or increased succeptibility to glaucoma or to a progressive ocular hypertensive containing in loss of visual field in a patient (or the severity or promoter resulting in loss of visual field in a patient (or the severity amplification reaction primers that direct amplification of a selected conclaining the variation within the optineurin containing the promoter amplification containing the variation within the optineurin containing the promoter appropriate of detecting a polymorphism (comprising containing a sample containing the minimal promoter and amplifying the DNA) and detecting a polymorphism (comprising containing the primers promoter and amplifying the DNA) and optineurin promoter, and detecting a polymorphism of capable of detecting a SNP located within an optineurin promoter, and detecting a polymorphism of a sample containing a sample containing the minimal promoter and application of a source and amplifying the DNA) and optineuring a polymorphism of capable promoter and amplifying the DNA) and optineuring a polymorphism of a sample containing the minimal promoter and amplifying the DNA) and optineuring a polymorphism of capable of detecting a SNP located within an optineuring a polymorphism of a selected and applicated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        detecting the polymorphism). The invention is used to diagnose and prognose glaucoma and also to treat glaucoma related disorders. The present sequence is an optineurin promoter motif, repeat element or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 16 BP; 3 A; 2 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 11; SEQ ID NO 378; 159pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  outative regulatory region.
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Best Local Similarity 92.33
Matches 12; Conservative
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1057 GCCCAAACCCAA 1069
          GCCCCAGACCCAA 3
                15
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               В
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Gaps

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844 CCCCAGATTGAGA 856

Best Loca Matches

4

CCCCAGATTGGGA

16

RESULT 1142

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The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving a an RNA molecule possessing an NCH motifi), a G-cleaver (cleaving RNA with a NGM motif) pr an amberzyme (cleaving RNA with an NGM triple!), a zinzyme (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^2.+. Furthermore, it may be contexted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more contexted. The comprise the use of one or more the reatment may further comprise the use of one or more contexted (NHL), bulky low-grade or follicular NHL, lymphocytic treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular nucleic acid may be used to be used to more the nucleic acid may be used to be used to cleave RNA associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma (MCL) immunocytoma (IMC), small B-cell lymphomy the NOGO gene in the presence of a divalent cation that is preferably Mg^22+. Furthermore, the
                                                                                                                                                                                                                                                 cerebroprotective; nootropic, neuroprotective; antiparkinsonian; mouscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; MCL; immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; ERC; immune thrombocytopaenia; stroke; demetria; inflammatory arthropathy; central nervous system injury; cenebroty accident; CVA; Alzheimer; sidsease; miltiple sclerosis; chemocherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                antisense therapy; cytostatic; antiinflammatory; haemostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, central nervous system injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chowrira BM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 88; Page 131; 200pp; English.
                                            ABK02378 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RIBO-) RIBOZYME PHARM INC. (BLAT/) BLATT L. (MCSW/) MCSWIGGEN J.
                                                                                                                                      (first entry)
                                                                                                                                                                                   Human NOGO Amberzyme #50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHOW/) CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-607195/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens.
                                                                                                                                      12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-AUG-2001.
                                                                                                                                                                                                                                  Human; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blatt L,
                                                                                         ABK02378;
RESULT 1143
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The invention relates to a cyclic adenosine monophosphate (cAMP) phosphodiesterase type 7 (PDE7a3) splice variant. The polypeptide can be expressed by standard recombinant methodology. The PDE7a3 splice variant polypeptides and polymucleotides are useful for treating cardiovascular diseases, asthma, allery, inflammatory diseases, fertility disorders and immunoregulator disorders. The polymucleotides are useful for producing transgenic animals, which include knock-in animals (in which an animal
                                                                                                                                                                                                                                                                                                 ö
nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of the treatment may further comprise the use of one or more the reaction in particular, the NOGO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CNA, stroke), Alzelener's disease, dementia, multiple sclerosis (MS), chemocherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creuzzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modellation of NOGO expression. The present sequence is an amberzyme molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New polypeptide of splice variant of cyclic adenosine monophosphate phosphodiesterase type 7 and polynucleotides, useful as vaccines for inducing immune response against diseases e.g. cardiovascular diseases
                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cyclic adenosine monophosphate; cAMP; cAMP phosphodiesterase type 7; PDE7a3; splice variant; transgenic; PCR; cardiant; antiinflammatory; antiallergic; antiasthmatic; antiinfertility; vaccine; primer; ss.
                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human PDE7a3 splice variant DNA amplifying primer PDE7a3For.
                                                                                                                                                                                                                                                            0.5%; Score 11.4; DB 1; Length 17; 69.2%; Pred. No. 9.2e+02; ive 3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= a
/note= "this nucleotide is indicated as G
                                                                                                                                                                                                                            Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example; Page 27; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-APR-2000; 2000EP-00109267.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-APR-2001; 2001WO-EP004785.
                                                                                                                                                                                                                                                                                                                                          1506 GCTGGAGCTGCTG 1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABL58392 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                Ouery Match
Best Local Similarity 69.22
Best Local Similarity
Conservative
                                                                                                                                                                                                                                                                                                                                                               ||:|||| :||:|
GCUGGAGGUGCUG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MERE ) MERCK PATENT GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-034516/04.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-NOV-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kluxen F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABL58392;
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ВР.

(first entry)

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Assessing cardiovascular status in humans by polymorphic analysis - of genes for angiotensin converting enzyme, angiotensinogen and angiotensin II_receptor, used to diagnose predisposition to disease and to predict
                                                                                                                     PCR primer; human; ACE; angiotensin converting enzyme; angiotensinogen; cardiovascular status; AGT; ATI; type 1 angiotensin II receptor; stroke; polymorphic pattern; blood presente; electrocardiographic profile; cardiac condition diagnosis; myccardial infarction; atherosclerosis; hypertension; cardiovascular disease; ss.
                                                                                                 Primer ACE/108RB for human ACE gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 27; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                              Norberg LT, Andersson MK,
              AAV08583 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                (EURO-) EURONA MEDICAL AB
                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-568361/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     II receptor, used
effect of therapy
                                                                                                                                                                                                                                    Homo sapiens,
                                                                                                                                                                                                                                                                                                                       01-APR-1998;
                                                                                                                                                                                                                                                               WO9845477-A2
                                                                                                                                                                                                                                                                                                                                                    04-APR-1997;
                                                                        15-FEB-1999
                                                                                                                                                                                                                                                                                           15-OCT-1998.
                                                                                                                                                                                                                      Synthetic.
                                             AAV08583;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tumour
gene is replaced by human equivalent within the genome of the animal), useful in drug discovery process, for target validation. The PDE7a3 splice variant polypeptides and polymorlocuties are useful as vaccines for inducing an immunological response in a mammal. Sequences ABL58392-93 represent PCR primers used to verify the existence of the novel PDE7a3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an isolated DNA molecule which encodes a polypeptide capable of binding to an intracellular domain of a p55 tumour necrotic factor (TNF) receptor. The DNA molecule is useful for preparing a composition for treating tumour, rhemmatoid arthritis or inflammatory diseases. The invention is useful in gene therapy. The present sequence is a PCR primer used in the construction of soluble dimeric TNF receptor
                                                                                                                                                                                                                                                                                                                                                                      Antisense PCR primer, EC55 to construct soluble dimeric TNF receptor.
                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New DNA molecule encoding a polypeptide capable of binding to an untracellular domain of a p55 tumor necrotic factor (TNF) receptor, useful for preparing a composition for treating tumor, rheumatoid arthritis or inflammatory diseases.
                                                                                                                                                                                                                                                                                                                                                                                                 Intracellular domain; IC; p55 tumour necrotic factor receptor; TNF; tumour; rheumatoid arthritis; inflammatory disease; gene therapy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.5%; Score 11.4; DB 1; Length 28;
larity 71.4%; Pred. No. 1.8e+03;
Conservative 0; Mismatches 6; Indels
                                                                                                                   Length 20;
                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 28 BP; 3 A; 9 C; 9 G; 7 T; 0 U; 0 Other;
                                                                                       Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                   0.5%; Score 11.4; DB 1; 92.3%; Pred. No. 1.4e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Varfolomeev E;
                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 4; Col 55; 126pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mett I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (YEDA ) YEDA RES & DEV CO LTD.
                                                                                                                                                                                                                                                                                   AAD61712 standard; DNA; 28 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95WO-US005854.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96US-00747562.
                                                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic; PCR; primer; ss.
                                                                                                                                                                             1416 GCTGGAGCTGCAG 1428
                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                   12; Conservative
                                                                                                                                                                                                          18 GCTGGAGCTGAAG 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Boldin M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-799831/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 15, Conserv
                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .2-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US6579697-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-MAY-1995;
                                                                                                                                                                                                                                                                                                                                             15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Inidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUN-2003.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                 AAD61712;
                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wallach
                                                                                                                                                                                                                                                       RESULT 1145
                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                       AAD617
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Lindstroem PHR;

97US-0042930P.

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This sequence represents a PCR primer for the human ACE (angiotensin converting enzyme) gene, and can be used in the method of the invention. The method is for assessing cardiovascular status in humans by C determining the sequence of at least one polymorphic site in the ACE (angiotensin converting enzyme), AGT (angiotensin Dy ACT) (type I angiotensin II receptor) genes, and comparing the polymorphic pattern of with that in patients with predetermined markers of status. The method is used to assess blood pressure or electrocardiographic profile, to the intension, atherosclerosis or stroke. They can also be used to predict corporate to treatments with ACE inhibitors, angiotensin II receptor angonists, diuretics, alpha- or beta-adrenergic receptor antagonists, corporate to treatments with ACE inhibitors, angiotensin II receptor antagonists, corporate of nucleic acids containing polymorphic positions in the genes, and libraries of targets corresponding to the peptides from the genes are used to screen for cardiovascular agents. The nucleic acids the genes are used to screen for cardiovascular agents. The nucleic acids the genes are used to screen for cardiovascular agents.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the genes are used to screen for cardiovascular agents. The contained in the library can be is used as source of probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 8.7e+02; rive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 16 BP; 1 A; 9 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                232 AGTGAGAGGCCATAGC 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA38209 standard; DNA; 16
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Best Local 8
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Matches
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ID AAA3
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AC AAA3
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Gaps

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1827 CGTGGGCTCAAGAGCCTGAGT 1847

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RESULT 1146

(first entry)

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The invention relates to a novel method of assessing the cardiovascular status in an individual and to newly identified polymorphisms in the genes encoding angiotensin-converting enzyme (ACB), angiotensin II receptor type 1 (ATI) and type 2 (AT2), angiotensin II receptor type 1 (ATI) and type 2 (AT2), angiotensin II receptor type 1 (ATI) and type 2 (AT2), angiotensing in II receptor type 1 (ATI) and type 2 (AT2), angiotensing in II receptor type 1 (ATI) and type 2 (AT2), angiotensing the addressing the cardiovascular andothelin receptor type A and comparing the pattern of polymorphic positions within these genes, and comparing the pattern obtained from a population of individual with a reference polymorphic pattern obtained from a population of individual exhibiting a useful for determining the predisposition of an individual to cardiovascular disorders such as myocardial infarction, unstable angina, hypertension, atherosclerosis and stroke. They are also useful for predicting the likely cardiovascular disorders and across of cardiovascular disorders and across of they cardiovascular decreased and stroke. They are also useful for predicting the likely cardiovascular decreased to cardiovascular decreased and angioted to a partion of articular pattern treatment regimen. Act inhibitors, beta-adranezyic receptor antagonists (beta-blockers) or calcium channel blockers). Come or more polymorphic markers provides a basis for predicting the outcome of a treatment regimen. Fragments of the genes comprising apolymorphic site may be used as provides a past of detecting panetic polymorphic pattern reduces or inhibitors from clinical trials who are predicted to be noncentument from the streament regimen. Adverse results in an early trial can be evaluated to eliminate patients from clinical trials who are predicted to be noncentument regimen. Adverse results in an early trial can be evaluated to correlated with a sub-population of the terresponse, to a partioular patients from the treatment group. Beneficial drugs can be apu
                                                                                                 Angiotensin-converting enzyme gene, ACB; polymorphism; polymorphic marker; cardiovascular disease; myocardial infarction; unstable angina; hypertension; atherosclerosis; stroke; prognosis; drug screening; treatment outcome; human; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polymorphic pattern comprising polymorphic positions within genes encoding specific proteins, with reference polymorphic pattern.
                                                        Human angiotensin-converting enzyme (ACE) PCR primer, SEQ ID NO:9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Assessing cardiovascular status in humans involves comparing test
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Norberg LT, Andersson MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-318010/27
                                                                                                                                                                                                                                                         W0200022166-A2
                                                                                                                                                                                                                Homo sapiens.
                      21-AUG-2000
                                                                                                                                                                                                                                                                                                                                         13-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                           14-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                    14-OCT-1998;
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Example 1; Page 48; 126pp; English

BP; 1 A; 9 C; 2 G; 4 T; 0 U; 0 Other;

Sequence 16

Joneson L;

Lindstrom PHR,

(EURO-) EURONA MEDICAL AB

99WO-IB001678 98US-0104286P 98US-0104302P

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention is related to methods for determining the polymorphic pattern of an individual and using the results to determine their risk of a number of diseases, including cancer, cardiovascular diseases, glaucoma and nervous system disorders such as depression and neurodegenerative diseases. In addition, the methods can be used to determine the effects of different types of treatment for individuals, and thus enables appropriate therapies to be prescribed. THe PCR primers shown in sequences AAC61201-C61371 were all used to demonstrate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   at one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Assessing disease status in individual by determining sequence(s) at or or more polymorphic positions within the human genes encoding the protein(s) involved in physiological pathway associated with treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                           Gaps
                                                                                                                                                                                                                                                                 Human, genetic polymorphism; disease diagnosis; treatment; cancer; cardiovascular system; nervous system; glaucoma; PCR primer; ss.
                                                                                                                                                                                                                                      Human ACE, AGT and AT1 genes polymorphisms PCR primer SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sanders R;
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81.2%; Pred. No. 8.7e+02;
Length 16;
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0.5%; Score 11.2; DB 1; Length 181.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jonsson L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 55; 141pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 232 AGTGAGAGGCCATAGC 247
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99WO-IB000497.
99US-0126243P.
99US-00471890.
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                                                                                                                                                        AAC61209 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GEMI-) GEMINI GENOMICS AB
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                                                                                                                                                                                                               (first entry)
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nes 13; Conservative
                                                         232 AGTGAGAGGCCATAGC
                                                                                    AGTGAGAGGCGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      methods of the invention
                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-638268/61.
   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                            WO200056922-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                   23-MAR-2000;
                                                                                                                                                                                                                                                                                                                Homo sapiens
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23-DEC-1999;
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                               13;
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                                                                                                                                                                                      AAC61209;
                                                                                     16
                                                                                                                           RESULT 1148
AAC61209/c
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Matches
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ID AAQ2
XX
                               Matches
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Transcriptional control recognition element recognition sequences may be recognised by control proteins and are involved in either enhancing or repressing transcription of associated sequences. TCR sequences include promoter elements, hormone receptor elements, viral, cellular, liver or tissue elements, etc. The sequence represents an exemplary tissue associated element, the immunoglobulin gene enhancer element mu E2. A typical application of the TCRE recognising oligonucleotides is inhibition of viral proliferation. See also AAQ30472-518. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New oligo-nucleotide(s) contg. transcription control recognition element - stabilised by covalent bonding of two DNA strands, act as decoys for regulatory protein to modulate specific RNA.
                                                                                                                                                                 The sequence is the complement of (250) (AAQ24927). The selected primer is used in practice of the single primer amplification reaction (SPAR). (Updated on 25-MAR-2003 to correct PN field.)
                                                         Nucleic acid sequence single primer amplification - useful for genomic variation analysis and polymorphism detection for restriction fragment length data.
                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Transcriptional control recognition element, decoy, cellular RNA, promoter, hormone receptor element, viral; liver; tissue, viral; proliferation; linker, NF-1; ss.
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                                                                                                                                                                                                                                                                             Query Match

0.5%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 8.7e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immunoglobulin gene mu E2 enhancer under control of TCRE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 16 BP; 3 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                              Sequence 16 BP; 5 A; 1 C; 9 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 7; 41pp; English.
                                                                                                                                        Claim 16; Page 39; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                          1131 CTTCACCTCCAGCTCC 1146
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Filner P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (revised)
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                                WPI; 1992-183683/22.
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Cardineau GA,
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19-MAR-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SXGXGTTXSXCCCXS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence is the complement of (250) (AAQ24927). The selected primer is used in practice of the single primer amplification reaction (SPAR). (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid sequence single primer amplification - useful for genomic variation analysis and polymorphism detection for restriction fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match 0.5%; Score 11.2; DB 1; Length 16; Local Similarity 81.2%; Pred. No. 8.7e+02; nes 13; Conservative 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homeo box consensus sequence primer (258).
                                                                                          Homeo box consensus sequence primer (258)
                                                                                                                            Single primer amplification; SPAR; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Single primer amplification; SPAR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 16; Page 39; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1419 GGAGCTGCAGAACGGG 1434
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91US-00737919.
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                                                                                                                                                                                                                                                                                                         90US-00610973.
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(first entry)
                                    (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                  Cardineau GA, Filner P;
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                                                                                                                                                                                                                                                                                                                                                               (LUBR ) LUBRIZOL CORP.
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29-JUL-1991;
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29-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          length data.
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19-NOV-1992
                                                                                                                                                                                                    NO9207948-A1
                                                                                                                                                                                                                                                                       15-NOV-1991;
                                    25-MAR-2003
19-NOV-1992
                                                                                                                                                                                                                                    14-MAY-1992
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                                                                                                                                                               Synthetic.
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   AAQ24931;
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Matches
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δ g RESULT 1152 AAQ21918/

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The sequences given in AAQ92112-211 are probes which were used in the detection of a mutant p53 gene sequence. The DNA to be detected is amplified using PCR and then these probes which are pref. labeled using 12-P gamma-ATP are used to detect the mutant sequences. The primers and probes given in AAQ92096-213 are used in the method of the invention for detecting mammalian target DNA in sputum samples. Analysis of the target DNA is used to diagnose benign or malignant neoplasms of the lung. It is also useful for screening people at high risk or for monitoring progress of treatment of lung neoplasms. The method is based on the discovery that mutant terget DNA associated with lung cancer is present at detectable levels in sputum. Cells shed into sputum from head and neck cancers may also be detected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Detecting target nucleic acid in mammalian sputum - particularly for diagnosis of lung neoplasia involving mutation(s) in the K-ras oncogene
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Primer; polymerase chain reaction, amplify; mutant; K-ras; PCR; flanking region; amplification; probe; detection; sputum; diagnosis; benign; malignant; neoplasm; lung; lung cancer; head; neck; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 16 BP; 3 A; 9 C; 3 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                            p53 detection probe, (codon 176 TGC to TAC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYJO ) UNIV JOHNS HOPKINS SCHOOL MED
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1174 TTTGCGGCTCCCGCA 1189
                                                                                                                                                                                                            ВР.
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                                                                                                                                                                                                                AAQ92129 standard; DNA; 16
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                                             16 Tridcaacreecera
                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-2003
21-MAY-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
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                                                                                                                                                                                                                                                                       AAQ92129;
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Matches
                                                                                                                                                                                  AAQ92129
                                                                                                                                                                                                                                                                       SECOND CONTRACTOR SECOND SECON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New oligo nucleoside(s) and nucleotide(s) with up to 200 bases - nuclease resistant anti sense cpds. useful for treating hereditary disorders of altered genetic expression mechanisms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tetraethylene glycol; cancer; antisense; gene expression; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                   Length 16;
                          Query Match 0.5%; Score 11.2; DB 1; Length 10 Best Local Similarity 81.2%; Pred. No. 8.7e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TEG-terminated exonuclease stable oligonucleotide #27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chaturvedu PVC,
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mod_base= OTHER
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900S-00582456.
900S-00582457.
910S-00682784.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hausheer FH,
, Oakes FT;
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modified_base
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13-SEP-1990;
13-SEP-1990;
13-SEP-1990;
09-APR-1991;
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Moskwa PS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
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Gaps

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Ancylostoma secreted protein; ASP-1; hookworm; vaccine; ARACE; Ancylostoma caninum; polymerase chain reaction; PCR; primer; 5'RACE; rapid amplification of cDNA ends; ss.

Ancylostoma secreted protein ASP-1 primer GSP 2.

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This invention describes the use of novel acidophilic and thermostable xylanase enzymes (XYL I and XYL II) from Actinomadura sp. FC7 which retain their activity under harsh industrial conditions (e.g. high temperature or wide pH ranges) and may be secreted by recombinant host cemperature or wide pH ranges) and may be secreted by recombinant host calls, to treat plant biomass Xylanases XYL I and XYL II are part of a large group of hemicellulase enzymes and function by cutting the beta-1,4 bonds within the xylosic chain of xylan (a polymer of D-xylose residues that is a major constituent of hemicellulose). This means that they may be used in the paper and pulp industry to improve the efficiency of the bleaching process by degrading the structure of the material. XYL I and XYL II may also be used to treat feed, by degrading a substrate with a high temperatures (e.g. 70 deg. C) and at low pis (e.g. 4.0), conditions which tend to denature most known xylanases. Enzymes that cartive in these conditions may be used in industrial processes that are cartied out at high temperature and low pit to speed up other, non-enzymatic reactions, minimising costs, energy requirements, and the facilitate chlorine bleaching of paper pulp which is carried out in hot, acidic conditions). Pretreatment with XYL I and XYL II, allows the bleaching agents to penetrate better, to remove lignin from the pulp and colouration from it of main semilar engents of the degents can be used to produce the same or a better regult. Also, degruty and be used to produce the same or a better regult. Also, certified the structure aids water drainage. NOTE: This patent is an equivalent to F19503640. (Updated on 25-MAR-2003 to correct DR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New acidophilic and thermostable xylanase enzymes from Actinomadura sp. RC7 - useful for treating plant biomass, especially paper and wood pulp, to degrade hemicellulose and hydrolyse xylan.
                                                            Xylanase; acidophilic; thermostable; XXL I; XYL II; plant biomass; hemicellulase; beta-1,4 bond; xylosic chain; xylan; D-xylose; paper; pulp; chlorine bleaching; feed; beta-glucan; cellulose; lignin; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seguence 16 BP; 2 A; 3 C; 9 G; 0 T; 2 U; 0 Other;
                     Streptomyces sp. orf1590 gene RBS RNA fragment
                                                                                                                                                                                                                                                                                                                                                                                                                             Dery CV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sxample 7; Fig 7; 60pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                             Brzezinski R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGCGCCACCCTCG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1996-141348/14.
                                                                                                                                                         Streptomyces sp
                                                                                                                                                                                                                                                                                           29-JUL-1994;
                                                                                                                                                                                                                                                                                                                                       29-JUL-1994;
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these bases is a 6'-substituted carba
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                                                                                                                                                                                                                                                        Query Match 0.5%; Score 11.2; DB 1; Length 16; Best Local Similarity 81.2%; Pred. No. 8.7e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                    antisense therapy; nucleoside carba analogue; diagnostic;
                                                                                                                                                                                                                                            Sequence 16 BP; 4 A; 7 C; 5 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                analogue of T"
                                                                                                                                                                                                                                                                                    1290 CCACAAGCCACAGAGC 1305
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
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Gaps

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(first entry)

17-JAN-1997

AAT38471;

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PCR primer GSP 2 (AAT38471) is based on Ancylostoma secreted protein (ASP) genes (see also AAT38466-68), and is located internally to primer (SAP1 see also AAT38400). It was used with a S' poly(6) anchor primer (AAT38473) in a S'RACE PCR amplification of Ancylostoma canthum L3 larva cDNA. A second PCR using nested primers (see also AAT38472-73) yielded (AAT38465) coding for ASP-1 (AAW04321), a protein useful in hookworm vaccine, was identified

Ancylostoma caninum secreted protein - useful as antigen for hookworm

Jones BF

Hawdon JM, Hotez PJ, WPI; 1996-477130/47.

(UYYA) UNIV YALE

95US-00419414.

10-APR-1996; 10-APR-1995;

WO9632479-A1

Synthetic.

17-0CT-1996

Example 1, Page 33; 66pp; English

vaccine prodn

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This sequence represents a probe for the precore region of hepatitis by virus (HBV). This sequence can be used in the method of the invention for detection and/or genetic analysis of hepatitis B virus (HBV) in a sample. The method comprises: (a) optionally releasing, isolating or concentrating polynucleic acids (1) in the sample, and amplifying the crietavant part of a suitable HBV gene in the sample and amplifying the crietavant part of a suitable HBV gene in the sample with at least consultable primer pair; (b) hybridising (1) with a combination of at least composite and hybridise specifically to mutent target sequences chosen from the HBV RP pol gene region, HBV procore region, HBABy region and/or HBV composition that the sample from the composition specificating the hybridise formed in step (b), and inferring the HBV genotype and/or mutants present in the sample from the differential hybridisation signal(s). The composition can be used to diagnose and/or monitor HBV mutants and/or genotypes in a sample, specifically genotype, precore mutations, vaccine escape mutations and RT generalization; (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive guancine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in
             Detection and/or genetic analysis of hepatitis B virus - specifically genotype, precore mutations, vaccine escape mutations and RT gene mutations selected by treatment with drugs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene; antisense oligonucleotide; modulate; gene expression; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.5%; Score 11.2; DB 1; Length 16; Best Local Similarity 81.2%; Pred. No. 8.7e+02; Matches 13; Conservative 0; Mismatches 3; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 16 BP; 1 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rb gene antisense oligonucleotide rb-45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 10; Fig 9a; 286pp; English
                                                                                          Claim 5; Page 26; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1053 CCTGGCCCCAAACCCA 1068
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                                                                                                                                                                                                                                                An oligonuclectide is claimed which contains 2-200 residues of natural or synthetic nucleosides which are linked via a nucleotide bridging group.

At least 2 of the residues are nucleoside carba analogues (i.e. mucleosides in which the furance ring is replaced by a cyclopentane ring) having a defined generic formula given in the patent; and at least conclude these nucleosides are consecutive on at least one occasion. The oligonucleotides can be used in antisense therapy for treating infections and diseases, e.g. by blocking the expression of bloactive proteins at the level of nucleic acids (e.g. oncogenes). They can also be used as diagnostic agents for detecting viral infections or genetically determined diseases. They have a higher antisense activity in cellular experiments than that of oligonucleotide which contain natural conclusions of the carba analogues. Furthermore they have increased stability towards degradation by nucleases, and their pairing with complementary RNA is improved. The present sequence is a specific example of an oligonucleotide containing the carba analogues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis; preCore region; HBsAg region; genotype specific target; mutation detection; ss.
                                                                                                                                                             New oligo:nucleotide(s) for use in anti:sense therapy - having at least two consecutive 6-substd carbocyclic nucleoside(s) in their sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.5%; Score 11.2; DB 1; Length 16; Best Local Similarity 81.2%; Pred. No. 8.7e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 16 BP; 1 A; S C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Probe HBPr9 for preCore region of HBV.
                                                                                                                                                                                                                   Example C2; Page 47; 73pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1002 GAAATCGACACCTGAA 1017
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                 19-DEC-1994; 94CH-00003825,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97WO-EP002002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-APR-1996; 96EP-00870053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16 GAAACGGACACCTGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV14113 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (INNO-) INNOGENETICS NV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
                                                   (CIBA ) CIBA GEIGY AG
                                                                                                                            WPI; 1996-309503/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VPI; 1997-535867/49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-AUG-2003
19-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9740193-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-OCT-1997.
                                                                                          Altmann K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV14113;
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Gaps

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AAV49008-236 represent antisense oligonucleotides directed against the rb gene. Of these, only aligonucleotides AAV49008-52 resulted in effective gene. Of these, only aligonucleotides AAV49052-236 had little effect. The oligonucleotides exemplify the navigation of negative growth control by rb, while oligonucleotides cannot contain the specification describes oligonucleotides that contain 8-30 nucleotides, which contain at most 8 nucleotides that contain 8-30 nucleotides which contain at most 8 nucleotides that contain 8-30 nucleotides cach to four consecutive cytosines; do not contain two sequences of three consecutive nucleotides each able to form three H-bonds each to faur consecutive cytosines; do not contain two sequences of three consecutive cytosines, and the ratio between three H-bonds to three consecutive cytosines, and the ratio between the H-bonds to three consecutive cytosines, and the ratio between the H-bonds to three consecutive cytosines, and the ratio between the H-bonds to three consecutive cytosines, and the ratio between the H-bonds to the two sequences of three consecutive cytosines, and the ratio between the H-bonds to the two sequences of oligonucleotides are used to modulate expression of genes, particularly the genes for p53, ErB-2, junB, junD, TGF-bera lor robers 2 to control proliferation of primary cate of the consecution of primary cate, liver or kidney cells, osteoclasts and/or keratinocytes). The oligonucleotides can also be used to analyse thoration of primary cate of cancer or (targeting TGF) for the immune system
\frac{1}{2}
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Sequence 16 BP; 3 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

. 0 Gaps .; 0 Query Match 0.5%; Score 11.2; DB 1; Length 16; Best Local Similarity 81.2%; Pred. No. 8.7e+02; Matches 13; Conservative 0; Mismatches 3; Indels

741 GAACACCGTGTGCACC 756 16 GGACACTGTGTACACC 1 ò g

AAA04899 standard; DNA; 16 BP. RESULT 1159 AAA04899

AAA04899;

(first entry) 18-MAY-2000

Tenascin-C phosphorothioate antisense oligonucleotide SEQ ID NO:188. Human, Tenascin-C, extracellular matrix protein, phosphorothicate, antisense oligonuclectide, inhibition, exon deletion, therapy, cellular development, differentiation, translation, ss.

sapiens. Synthetic. WO200006775-A1.

10-FEB-2000.

98US-0094255P 27-JUL-1998;

99WO-US016632.

23-JUL-1999;

(UYVI-) UNIV VIRGINIA COMMONWEALTH.

Preparing antisense oligodeoxynuclectides (ODNs) and long antisense RNA sequences useful for blocking translation of a specific isoform of Tenascin-C protein. vPI; 2000-183137/16.

Conrad WS;

Gillies GT,

Broaddus WC,

Fillmore H,

Claim 23; Page 89; 177pp; English.

The present invention describes a method for preparing an antisense oligodeoxymucleotide (DDN) sequence for blocking translation of a specific protein isoform that can be expressed as number of different isoform. AAA05243 represent specifically claimed

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phosphorothioate antisense ODNs for blocking translation of Tenascin-C using the method of the invention. The method is useful for preparing an obn sequence for blocking translation of a specific isoform of Tenascin-C protein. The method is also useful for blocking translation of a specific family of isoforms of a protein. The method can also be performed by producing a long antisense expression vector encoding a long antisense producing translation of a specific protein isoform. The ODNs and long antisense constructs are useful in designing models for studying cellular development and differentiation. The method permits as a result of alternative splicing. AAA05244 represent an oligonucleotide from the present invention, which is given in the sequence listing but not mentioned further within the specification
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.5%; Score 11.2; DB 1; Length 16; Best Local Similarity 81.2%; Pred. No. 8.7e+02; Matche's 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                    Sequence 16 BP; 0 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1279 GAGGACAGCGCCCACA 1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 GAAGACAGCACCGACA 1
                à
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Reverse PCR primer for STP2 exons 5 and 6 amplification. ВЪ. AAZ59366 standard; DNA; 16 05-APR-2000 (first entry) AAZ59366; RESULT 1160 AAZ59366

Single nucleotide polymorphism; SNP; STP2; phenol sulphotransferase; genotyping; human; drug metabolism; PCR primer; ss.

Homo sapiens.

WO9964630-A1. 16-DEC-1999.

99WO-US013094; 09-JUN-1999;

98US-0088710P. 10-JUN-1998;

(AXYS-) AXYS PHARM INC.

Guida M, Kurth J;

WPI; 2000-105892/09.

Novel nucleic acid used for genotyping, e.g. to predict rate of drug metabolism.

Disclosure; Page 13; 46pp; English.

This sequence represents a PCR primer used in the amplification of exons 5 and 6 of human phenol sulphortansferase 2 (STP2). The invention relates from sequences AAZ59305-Z693152 which are fragments of the STP2 gene. The fragments are from the 8 exons, the promoter region, 3' and 5' untranslated regions of the STP2 gene. Each of the sequences contains a newly identified STP2 gene single uncleotide polymorphism (SNP). STP2 is a phenol sulphortansferase. Substrates for STP2 include minoxidit, acetaminophen, and paranitrophenol. Several of the nucleotide changes indentified at the polymorphism sites, give rise to an amino acid change. Amino acid changes can be used as probes for detecting STP2 polymorphisms. The polymorphic probes are used in screening and genotyphing, i.e. to predict the rate of metabolism of STP2 substrates, potential drug-drug interactions and adverse side effects. They can also be used to detect diseases resulting

in the CD36 genes. AAA40606 to AAA40759, and AAB02515 to AAB02564, represent nucleotide and amino acid sequences respectively which are used in the exemplification of the present invention

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The present invention describes isolated nucleic acid molecules (A) encoding mutant CD36 proteins (B). Parasites such as Plasmodium falciparum (the major cause of malaria) are unable to utilise the mutated proteins to gain entry to, and infect cells. The mutant CD36 proteins do not function correctly preventing parasites utilising them to infect cells. The mutant CD36 proteins do not function correctly preventing parasites utilising them to infect cells. The mutant CD36 proteins according to standard methodologies. They may be used in this way to prevent and treat parasitic infections that utilise the CD36 protein to infect cells, such as P. falciparum, the major cause to CD36 protein to infect cells, such as P. falciparum, the major cause of CD36 expression and activity or a patient's CD36 DNA may be screened to determine whether there are any mutations present that may confer resistance to parasitic infections. The proteins and mucleic acids may also be used to prevent, diagnose and treat diseases associated with defects in insulin action and/or facts diseases in insulin action and/or subjects possessing mutations
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, rat, CD36; SHR; spontaneous hypertensive rat; diagnosis; therapy; screening; polyworphism; variant; detection; mutant; blood; mutation; insulin; glucose metabolism; fatty acid metabolism; catecholamine; malaria; infection; parasite; antiparasitic; antidiabetic; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                              Human CD36 polymorphism sequence variant oligonucleotide SEQ ID NO:186
                                                                                                                                Gaps
from accidental or occupational exposure to toxins and to establish animal, cell or in vitro models for drug metabolism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acids encoding mutant CD36 proteins useful for preventing, diagnosing and treating parasitic infections, especially malaria.
                                                                                                                                ö
                                                                                       ch 0.5%; Score 11.2; DB 1; Length 16; l Similarity 81.2%; Pred. No. 8.7e+02; 13; Conservative 0; Mismatches 3; Indels
                                                       Sequence 16 BP; 5 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stanton LW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-00167750.
98US-00221222.
99US-00270542.
                                                                                                                                                                                                                                                                                                 AAA40694 standard; DNA; 16 BP
                                                                                                                                                                    874 GACTCAGGCACCACAG 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US023418
                                                                                                                                                                                                        GACTCAGGCACAGGAG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MEDI-) MEDICAL RES COUNCIL.
                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aitman TJ, Scott J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (STAN/) STANTON L W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-303596/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SCIOS INC.
AITMAN T J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200019883-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                        15-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-DEC-1998;
17-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-APR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                      AAA40694;
                                                                                       Query Match
Best Local S
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(AITM/)
(SCOT/)
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                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 anticancer; antiviral; immunomodulatory; cytotoxin; prodrug activator; replacement gene; antisense sequence; ribozyme; tumour prevention; viral infection; genetic disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New retroviral construct, used to produce retroviral particles for gene therapy, containing a gag/pol sequence that includes at least two stop codons, incapable of producing replicable virus by recombination.
                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide #2 used in gag-pol expression cassette construction
                                                                                                                                                                                                                                                                                                                                                                                                                                                    pol; retroviral vector construct; gag/pol expression cassette;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Respess JG;
                                                                                                                                           ·.
                                                                                                     Query Match 0.5%; Score 11.2; DB 1; Length 16; Best Local Similarity 81.2%; Pred. No. 8.7e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bodner M, Driver DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 16 BP; 6 A; 6 C; 3 G; 1 T; 0 U; 0 Other;
                                                                      Sequence 16 BP; 2 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 3; Col 24; 63pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sauter S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94US-00240030.
95US-00437465.
96US-00643411.
96US-00721327.
                                                                                                                                                                                936 CCTCTTCATTGGTTTA 951
                                                                                                                                                                                                                                                                                                      AAZ90068 standard; DNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US~00850961
                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-159877/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    genetic disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-MAY-1994;
09-MAY-1995;
06-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                               09-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US6013517-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                           AAZ90068;
                                                                                                                                                                                                                                                                      RESULT 1162
                                                                                                                                                                                                                                                                                       AAZ90068
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0.5%; Score 11.2; DB 1; Length 16;

Query Match

angiogenic disorder; wound healing; cancer; cardiovascular; psoriasis; vascular tumour; proliferative tumour; proliferative vitreoretinopathy; rheumatoid arthritis; Crohn's disease; atherosolerosis; endometriosis; neovascularisation; restenosis; hypertension; aneurysm; angina; myocardial infarction; pronic heart condition; osteoporosis; PCR primer; hybridisation; probe; ss.

01-NOV-2000; 2000WO-US030051.

WO200132926-A2.

10-MAY-2001

Homo sapiens

Synthetic.

Human; differentially expressed gene; angiogenesis; diagnosis;

Cathepsin B reverse PCR primer SEQ ID NO:43.

(first entry)

21-AUG-2001

AAH22297;

AAH22297 standard; DNA; 16 BP

AAH22297

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The present sequence is provided in a specification relating to a method interstitial lung disease. The method involves detecting an interleukin-l receptor antagonist (IL-IRN) (+2018) allele 2, a tumour necrosis alpha (TNF-A) (-308) allele 2, or an allele in linkage disequilibrium with either of these two alleles. The method may be used to determine whether a subject has or is predisposed to develop an interstitial pneumonia or a pulmonary fibrosis and other disorders such as rheumatoid arthritis, systemic lupus erythmatosis, Sjogren's syndrome, systemic sclerosis, dermatomyocitis. The method is also used for identifying molecules which can be used as therapeutics for treating interstitial lung disease
                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Method for predicting the risk of interstitial lung disease, comprising detecting an interleukin-1 receptor antagonist allele and tumor necrosis alpha allele or an allele in linkage disequilibrium with either of these
                                                                                                                                                                                                                                                                                                                                                                                                  pneumonia;
                                                                                                                                                                                                                                                                                                                                      Human; TNFalpha; tumour necrosis factor alpha; interleukin-1; IL-1; cytostatic; antiinflammatory; immunosuppressive; dermatological; antimicrobial; antierthritic; IL-1 receptor antagonist; TNFalpha antagonist; interstitial lung disease; interstitial pneumonia; pulmonary fibrosis; rheumatoid arthritis; systemic lupus erythmatosis; Sjogren's syndrome; systemic sclerosis; dermatomyocitis; chromosome 2;
                      Gaps
                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 11.2; DB 1; Length 16;
11.2%; Pred. No. 8.7e+02;
ve 0; Mismatches 3; Indels
  81.2%; Pred. No. 8.7e+02;
iive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                        Human TNFalpha gene Taqman assay probe 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 2; Page 71; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Whyte M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (INTE-) INTERLEUKIN GENETICS INC.
                                                          1056 GGCCCCAAACCCAAGC 1071
                                                                                                                                                                                           AAC63783 standard; DNA; 16 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-00286108.
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                                                                                              1 GGCGCCAAACCTAAAC 16
                                                                                                                                                                                                                                                                   (first entry)
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                        Conservative
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Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200060117-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                   08-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  alleles.
                                                                                                                                                       RESULT 1163
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The present invention describes differentially expressed genes involved in angiogenesis (1), and the polypeptides that encode them. (1) have cardiovascular activity, and can be used in the modulation of the angiogenesis. The nucleic acids and polypeptides may be used in the prevention, diagnosis and treatment of diseases associated with the production of antibodies against them and in assays to identify in the production of antibodies against them and in assays to identify conditators of their expression and activity. The antibodies and activity and modulate angiogenesis. The antibodies may also be used as diagnostic conditators that may be prevented, diagnosed and/or treated by the above theory and the prevented, diagnosed and/or treated by the above consorted include, for example vascular tumours, proliferative tumours, proliferative tumours, or proliferative vitreoretinopathy, theumatoid arthritis, Crohn's disease, atherosolerosis, ovarian hyperstimulation, pestidatis, endometriosis associated with neovascularisation, restencias usbecquent to balloon angioplasty, scar tissue over production. peripheral vascular disease and Reynaud's phenomenon, aneurysms, arterial restences, thrombophlebitis, conditions, heart failure such as congestive heart failure, age-related macular degeneration and osteoprosis. AAM12255 to AAM22255 to AAM39322 conditions, heart failure such as congestive heart failure, include include used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Differentially expressed genes involved in angiogenesis, useful for treating e.g. vascular tumors, atherosclerosis and/or restenosis subsequent to balloon angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 16 BP; 3 A; 9 C; 2 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rastelli L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 19; Page 148; 182pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1999; 99US-0162699P.
13-APR-2000; 2000US-0196802P.
31-QCT-2000; 2000US-00703350.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mehraban F, Gerritsen M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURA-) CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-291056/30.
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Score 11.2; DB 1; Length 16; Pred. No. 8.7e+02;

0.5%;

Query Match Best Local Similarity

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Gaps

.. 0

1245 CTCCGACCCCATCCCC 1260

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81.2%;

Query Match
Best Local Similarity 81.2
Matches 13; Conservative

CCCCGTCCCATGCCC 16

RESULT 1164

AAS56862;

RESULT 1165

AAS56862

Matches

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MOMIN; Moloney murine leukaemia virus; mouse; retroviral backbone; LTR; gag/pol expression cassette; gag; pol; env; integrase; gene therapy; ss; tumour; cancer; viral infection; immune response; autoimmune response; graft rejection; cytostatic; antiviral; immunostimulant; PCR; primer; immunosuppressive; murine leukaemia virus 40'0A amphotropic envelope; bovine growth hormone polyadenylation sequence; long terminal repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to the coding sequence of human Creaml, which is a protein containing a repetitive 86 amino acid motif. The protein is a transcriptional control factor, and is a conjugate of retinoblastoma protein (Rb). The present sequence is the an intron-exon junction in the coding sequence of the invention
                                                                                           protein coding sequence exon 25/intron 25 junction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New retinoblastoma protein binding protein, its preparation and application.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5%; Score 11.2; DB 1; Length 16;
81.2%; Pred. No. 8.7e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                 Human, Creaml; repeat; transcriptional control factor; Rb; retinoblastoma protein; intron-exon junction; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gag/pol expression cassette construction primer #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 16 BP; 4 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                (SHAN-) SHANGHAI INST CYTOBIOLOGY CHINESE ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure, Fig 3B; 35pp; Chinese.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABK33881 standard; DNA; 16 BP.
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                                                                                                                                                                                                                                                                                                                    07-JAN-2000; 2000CN-00111426.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Yan X, Qian M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-566148/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                 Human Creaml
                                                                                                                                                                                                                                                                                                                                                          07-JAN-2000;
                                                         04-DEC-2001
                                                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                                                     CN1303861-A.
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                     AAI64977;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhu X,
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequences AAS56729-AAS56968 represent DNA encoding BRCA-1 regulators, ribozyme target recognition RNA sequences, DNA fragments encoding the RNA and primers used in the methods of the invention. Hybridisation of ribozymes to their targets results in cleavage of the RNA target. The ribozymes can be used to cleave regulators of the tumour suppressor BRCA-1, resulting in upregulation or downregulation of BRCA-1 in a cell. The mRNA targets include those encoding the BRCA-1 regulator BRI, inhibitor dominant negative 4 (ID4), breast basic conserved protein 1 (BBCI), CHIR2, AF6, BR2 and BR3. Regulation of BRCA-1 is useful for treating and diagnosing cancer and other proliferative disorders. The severity of an incidence of cancer can be lessened by regulating tumour proliferation through modulation of BRCA-1 expression. The sequences of the invention are useful in the development of anti-cancer drugs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptides that are the regulators of BRCA-1, useful for treating diagnosing the presence of neoplastic cells in biological
                                                                                                                                                                                                                                                                                                                                       Human, BRCA-1 regulator, ribozyme, BR1, RNA target recognition, probe, cytosteatic, RNA cleavage, tumour suppressor; PCR primer, GETS2, AF6; BR inhibitor dominant negative 4; breast basic conserved protein 1; BBC1, BR3; ID4; cancer; proliferative disorder; tumour proliferation; ss.
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  Gaps
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  Indels
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  Mismatches
                                                                                                                                                                                                                                                                                                 Validation ribozyme DNA sequence #36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wong-Staal F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure, Fig 8; 97pp; English.
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                                        1126 TCCACCTTCACCTCCA 1141
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                                                                                                                                                                              AAS56862 standard; DNA; 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 GGAGCTCCGACTAAGC
                                                                              redecedacacereca
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  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel polypeptides that
cancer and diagnosing th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Beger C, Barber J,
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                          16-JAN-2002
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Query Match

Matches

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WPI; 2002-144136/19
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                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                           11-APR-2002
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                                                                                                                                                                                                                                                                                                                                                       ABL42982;
                                                                                                                                                                                                                                                                                                         RESULT 1169
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                                                                                                                                                                                                                  The invention relates to a gag/pol expression cassette comprising a promoter, a gag/pol gene (I) and a polyadenylation sequence in which the 5' end of (I) has been modified to contain codons that are degenerate for gag, or the 3' end of (I) has been deleted without affecting the biological activity of the encoded integrase. The expression cassette and similar cassettes that express env protein, are used to produce recombinant retroviral particles by homologous recombination. These particles are gene transfer vectors, particularly for gene therapy of tumours or viral infections, also to induce an immune response, to treat or prevent diseases, or to suppress graft rejection or immune/autoimmune responses. This sequence represents an oligonucleotide primer used in
                                                                                                                                         New gag/pol expression cassette, for preparing retroviral particles for gene therapy, comprises a promoter, a gag/pol gene, and a polyadenylation sequence, and cannot form a replication competent virus by homologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Norwalk-like virus genogroup II; GII; probe; ss; viral food poisoning; non-bacterial gastroenteritis; fish; shellfish; polluted water system.
                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                            construction of gag/pol expression cassettes of the invention
                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 11.2; DB 1; Length 16;
81.2%; Pred. No. 8.7e+02;
iive 0; Mismatches 3; Indels
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                                                                                                 Bodner M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Norwalk-like virus genogroup II (GII) cDNA probe #1
                                                                                                                                                                                                                                                                                                                                                                Sequence 16 BP; 6 A; 6 C; 3 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kojima S, Fukushi S, Hoshino F,
                                                                                                 Sauter S,
                                                                                                 Chada S,
                                                                                                                                                                                                Example 3; Col 24; 63pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                  1056 GGCCCCAAACCCAAGC 1071
          94US-00240030.
95US-00437465.
96US-00643411.
96US-00721327.
97US-00850961.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK49297 standard; DNA; 16 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.5
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                 Depolo NJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-340118/37
                                                                            CORP.
                                                                                                                     WPI; 2002-163181/21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Norwalk-like virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200229120-A1.
                                                                           (CHIR ) CHIRON
                                                                                                                                                                          recombination.
                               06-MAY-1996;
26-SEP-1996;
05-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUL-2002
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           09-MAY-1994;
                                                                                                 Respess JG,
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ABK49297/c
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                                                                                                                                                                                                                                                                                  The invention relates to a method of detecting a virus, particularly of Norwalk-like viruses, using as an indication the nucleic acids of both complementary base sequences corresponding to positions 4851-5450 in the base sequence of CDNA of the prototype of Norwalk-like virus genogroup II (GII). Detection of Norwalk-like virus (GII) is useful in diagnosis of viral food poisoning e.g. non-bacterial gastroenteritis, and for examining foods, particularly fish and shellfish, and infectivity of polluted water systems and other contemination sources like work clothes. This sequence represents a probe for Norwalk-like virus (GII) CDNA, used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates, (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction, (c) a signal corresponding to the marker is detected from the resultant plates containing the clones having said marker sequence, (d) the order of the markers is changed so that the same discrimination Nos. succeed to the markers is changed so that the same discrimination Nos succeed to the marker in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination nos may be multiwell and lateral directions; (f) the mixed clones are cultured and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
Detecting Norwalk-like virus (GII) with kits based on nucleic acids of both complementary base sequences of highly conserved domain in cDNA of its' prototype, useful in diagnosis of viral food poisoning.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                           Claim 12; Page 49; 52pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1229 TIGCGACAGCCCTCGC 1244
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The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates, (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is defected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to plates; (e) the clones in the multiwell plates of the specified discrimination Nos. succeed to the maximum in the specified discrimination Nos. are mixed respectively in each wells of longitudinal creation littless are mixed respectively in each wells of longitudinal resultant cultures are amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45321 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for the name in the present invention
resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1936-35 NM, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22:1, which are specifically claimed for use in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
                                                                                                                                                                                                                          / Match 0.5%; Score 11.2; DB 1; Length 16; Local Similarity 81.2%; Pred. No. 8.7e+02; les 13; Conservative 0; Mismatches 3: TnAele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human chromosome 1p36-35 PCR primer SEQ ID NO:1692.
                                                                                                                                                                                               Sequence 16 BP; 3 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 4; Page 38; 528pp; Japanese.
                                                                                                                                                                                                                                                                                                                            969 GTGGAAGTCCAAGCTC 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABL44648 standard; DNA; 16 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIKA ) RIKAGAKU KENKYUSHO.
(GENO-) GENOTEX YG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer; ss.
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                                                                                                                                                                                                                                          Query Match
Best Local Si
Matches 13;
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The present invention relates to proliferation potential proteins (P2P) and polynucleotides encoding such proteins. P2P cDNAs encode proteins with domains for hnRNP association and Rb1 binding. The interaction of P2P cDNA products and Rb1 serve to modulate cell proliferation and/or biological functions associated with tumour suppression by an RNA processing mechanism. Antisense oligonucleotides to P2P polynucleotides are used to repress the proliferative potential of a normal, abnormal or cancer cell. Sequences of the invention are also used for antisense gene therapy. The present DNA sequence is P2P antisense oligonucleotide used in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a cell
                                                                                                                                                                                                                                                                                                                                                Proliferation potential protein, P2P; hnRNP; Rb1; cell proliferation; tumour suppression; cancer; antisense gene therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated proliferation potential protein nucleic acid and it's antisense sequence, for repressing the proliferative potential of \varepsilon
                                                                                                                                                                                                                                                                                                                Proliferation potential protein (P2P) antisense oligonucleotide #2
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                          0.5%; Score 11.2; DB 1; Length 16; 31.2%; Pred. No. 8.7e+02; ve 0; Mismatches 3; Indels
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Sequence 16 BP; 3 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 16; Page 6; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYTE-) UNIV TENNESSEE RES CORP.
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                                                                                                 969 GIGGAAGICCAAGCIC 984
                                                                                                                                                                                                                  AAD33335 standard; DNA; 16 BP
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97US-00801308.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-MAR-2001; 2001US-00811045.
                               Query Match
Best Local Similarity 81.2%;
Matches 13; Conservative
                                                                                                                               Greechtricchaccrc 16
                                                                                                                                                                                                                                                                                    (first entry)
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Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                   US2002035080-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-SEP-1996;
18-FEB-1997;
                                                                                                                                                                                                                                                                                  01-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scott RE;
                                                                                                                                                                                                                                               AAD33335;
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ID ABL946
XX
                                                                                                                                                                                  RESULT 1171
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diseases

12-JUN-2002

ABL94677;

07-MAR-2002

receptors.

AAL47118;

RESULT 1173

Query Match

Best Loca Matches

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The present invention relates the DNA and their encoded proteins, where the proteins contain at least one PYD (pyrin) domain. These can be used to treat diseases associated with impaired intracellular signal transduction, particularly inflammation such as psoriasis, arteriosclerosis, bacterial or viral infections (particularly meningitis and pneumonia), multiple sclerosis, rheumatoid arthritis, asthma, sarcoidosis, glomerulonephritis and osteoarthritis, and also and Parkinson's diseases. The present sequence is a PCR primer used to isolate a coding sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gene panel participating in liver regeneration, applicable in providing
                                                                                                                                                                                                                                                                                                New DNA encoding protein with pyrin domain, useful for treating diseases involving impaired signal transduction, particularly inflammation, also proteins and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 primer, ss; liver regeneration, gene panel; expression profile; screening; drug development; hepatitis; liver transplantation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aburatani
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 11.2; DB 1; Length 16;
81.2%; Pred. No. 8.7e+02;
ive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 16 BP; 2 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Takahara Y,
                                                                                                                                                                                                                                                                                                                                                                                     Example; Page 49; 116pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1073 TCAGTCCCACTCCAGG 1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
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                                                                                                                                                                              (APOT-) APOTECH RES & DEV LTD.
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                                                                                                                 15-NOV-2000; 2000DE-01056687.
30-NOV-2000; 2000DE-01059595.
                                                                          30-OCT-2001; 2001WO-EP012545
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nes 13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-018922/01.
                                                                                                                                                                                                                          Ischopp J, Martinon
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WO200240668-A2
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                                     23-MAY-2002
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Sonaka I;
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention provides antisense sequences directed against the VRI mRNA. These can be used in the treatment of pain, especially chronic, heat-induced or inflammatory pain, tactile allodynia, urinary incontinence, neurogenic bladder symptoms, pruvitis, tumours and inflammation (particularly where associated with the VRI vanillaid receptor such as asthma). They are also useful for identifying analgesic agents. The present sequence is a VRI antisense sequence identified in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pyrin domain; PYD domain; antiinflammatory; antiparkinsonian; antiarteriosclerotic; antipsoriatic; antibacterial; virucide; neuroprotective; antiarhumatic; antiarhumatic; antiarhumatic; incorropic; osteopathic; noctropic; intracellular signal transduction; inflammation; Alzheimer's disease; infection; psoriasis; asthma; arteriosclerosis; multiple sclerosis; rheumatoid arthritis; sarcoidosis; osteoarthritis; glomerulonephritis; PCR; primer; ss.
                                                                                                                   Analgesic; antisense; VR1; antiinflammatory; uropathic; pain; cancer; vanilloid receptor; antipruritic; cytostatic; antiasthmatic; pruritis; gene therapy; tactile allodynia; urinary incontinence; inflammation; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides and ribozymes, useful for treating e.g. pain and for diagnosis, are directed against mRNA for vanilloid-family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pyrin domain containing protein coding sequence PCR primer JT1512
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 16 BP; 2 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                Human VR1 antisense oligonucleotide #65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1070 GCTTCAGTCCCACTCC 1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Fig 10; 76pp; German.
                                                                                                                                                                                                                                                                                                                                                                        02-SEP-2000; 2000DE-01043674.
04-SEP-2000; 2000DE-01043702.
                                                                                                                                                                                                                                                                                                                                 31-AUG-2001; 2001WO-EP010081
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                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                   CHEF ) GRUENENTHAL GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kurreck J, Erdmann VA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-281058/32
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tes 13; Conserv
                                                                                                                                                                                                                                                  WO200218407-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified
                                                                                                                                                                                                             Homo sapiens.
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Gaps

schultz451-1.rng

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invention
  cancer.
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expression data, diagnosis and development of drugs for promoting liver regeneration e.g. after transplantation or removal of liver during Claim 19; Page 60; 101pp; Japanese The invention comprises a gene panel constructed from the expression profile of known genes which show a change in expression level between normal liver cells and liver cells under regeneration. The gene panel is useful for providing expression data and screening/development of drugs for liver regeneration (e.g. when treating hepatitis, after transplantation or removal of the liver during cancer or hepatitis therapy). The present DNA sequence represents a PCR primer used in the

Sequence 16 BP; 4 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

. 0 Gaps . 0 Match 0.5%; Score 11.2; DB 1; Length 16; Local Similarity 81.2%; Pred. No. 8.7e+02; les 13; Conservative 0; Mismatches 3; Indels Query Match Matches

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ABT13552 standard; DNA; 16 ABT13552; RESULT 1175 ABT13552

BP.

(first entry) 07-FEB-2003

Liver regeneration-related gene panel PCR primer #80.

PCR; primer; ss; liver regeneration; gene panel; expression profile; drug screening; drug development; hepatitis; liver transplantation.

Unidentified

WO200277222-A1.

03-OCT-2002

13-MAR-2002; 2002WO-JP002372.

13-MAR-2001; 2001JP-00070940.

(AJIN) AJINOMOTO CO INC.

Aburatani H; Takahara Y, Fukuda H, Okutsu T, Mori M, WPI; 2003-018922/01. Yokoya F, Sonaka I; Sonaka

Gene panel participating in liver regeneration, applicable in providing expression data, diagnosis and development of drugs for promoting liver regeneration e.g. after transplantation or removal of liver during

Claim 19; Page 67; 101pp; Japanese.

cancer.

The invention comprises a gene panel constructed from the expression profile of known genes which show a change in expression level between normal liver cells and liver cells under regeneration. The gene panel i useful for providing expression data and screening/development of drugs for liver regeneration (e.g. when treating hepstitis, after transplantation or removal of the liver during cancer or hepatitis therapy). The present DNA sequence represents a PCR primer used in the

Sequence 16 BP; 4 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                               Treating infection or reactivation caused by Herpes virus comprises using antagonist of Herpes Simplex virus polynucleotide sequence and interferon
                  Gaps
                                                                                                                                                                              ds; interferon regulatory factor; IRF-1; IRF-2; herpes; antiviral; transcription factor; virucide; vaccine; interferon.
                  ô
 Length 16;
                  3; Indels
0.5%; Score 11.2; DB 1;
llarity 81.2%; Pred. No. 8.7e+02;
Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; SEQ ID NO 7; 53pp; English.
                                                                                                                                                           HSV-1 (17+) IRF-1 binding site #6.
                                                                                                                                                                                                           Human herpesvirus 1; strain 17+.
                                                                                                                                                                                                                                                                                                       (SMIK ) SMITHKLINE BEECHAM CORP.
                                     760
                                                                                                                                                                                                                                                                  26-MAR-2002; 2002US-00108164.
                                                                                                                                                                                                                                                                                     99US-00424348.
                                                       16 AGCGTTTGAACCTGCC 1
                                                                                                      ADD07159 Standard; DNA; 16
                                                                                                                                          (first entry)
                                     745 ACCGTGTGCACCTGCC
                                                                                                                                                                                                                                                                                                                                                                        antagonist of Herpes regulatory factor-1.
                                                                                                                                                                                                                                                                                                                                           WPI; 2003-801223/75
         Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                              US2003104356-A1
                                                                                                                                                                                                                                                                                      22-NOV-1999;
                                                                                                                                          01-JAN-2004
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                                                                                                                                                                                                                                                                                                                          Berger SL;
                                                                                                                        ADD07159;
  Query Match
                                                                                    RESULT 1176
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The invention relates to treating viral infection or reactivation comprising contacting an individual with an antagonist of the interaction between a Herapes Simple x virus (HSV) polymucleotide sequence appearing as ADD07153 and interferon regulatory factor—I (IRR-I, a transcription factor of the interferon regulatory pathway). Also included are an included HSV polymucleotide comprising ADD07153, a composition comprising of HSV polymetheoride comprising specific binding of IRF-I to a polymucleotide, screening for compounds capable of inhibiting specific binding of IRF-I to IRR-I:IRF-BP (undefined) complex, a compound capable of adonising or antagonising any compound in IRF-I and/or interferon of agonising or antagonising any compound in IRF-I and/or interferon infection or reactivation caused by Herpes virus, e.g., HSV-I or HSV-I infections and for cytomegalovirus, Espetein Barr virus and zoster virus infection. The HSV polymethide and polymucleotides may also be useful as infection. The HSV polymethide and polymucleotides may also be useful as a manification. ö Gaps ô 0.5%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels Sequence 16 BP; 4 A; 9 C; 0 G; 3 T; 0 U; 0 Other; Local Similarity 81.2 nes 13; Conservative IRF-1 binding site Query Match Matches

1128 CACCTTCACCTCCAGC 1143

ò g

CACCATCACTTCCACC 16

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The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGOD). The nucleic acids and the control of a manage of a strong or a subozyme or a DNazyme an Inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH mocif), a G-cleaver (Cleaving RNA with a NYM motif) prossessing an NCH mocif), a G-cleaver (Cleaving RNA with a NYM motif) prossessing an NCH mocif), a G-cleaver (Cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The Drawing a condition associated with the level of CD20. The treatment may further comprise the use of one or more the cell and treat a partient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more of CD20. The treatment may further comprise the use of one or more the cell and treatment as further comprise the use of one or more treat lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic creat lymphoma (MCL), immunocytoma (INC), small B-cell lymphoma, immunocytoma (INC), small B-cell lymphoma, immunocytoma (INC), small B-cell lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO gene in the targetting nucleic acid is used to cleave RNA of the NOGO gene in the
                                                                                                                                                                                                  Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; incygme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIY associated NHL; lymphocytic leukaemia; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntingcon's disease; ataxia; Huntingcon's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 88; Page 98; 200pp; English.
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                    ABK01806 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
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                                                                                                               (first entry)
                                                                                                                                                               Human NOGO Zinzyme #128.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J.
(CHOW/) CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-607195/69.
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                                                                                                               12-MAR-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                 ABK01806;
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ABK01806
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presence of a divalent cation that is preferably Mg^2^+. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), barkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a zinzyme molecule of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MD23, MD24, MD27, MD212, MD23 is encoded at chromosome 7922:1, MD24 is encoded at chromosome 6p21:3-22.2, MD27 is encoded at chromosome 16p1:2 and MD212 is encoded at chromosome 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for disagnosing or monitoring a disease caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ1; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                         0.5%; Score 11.2; DB 1; Length 17; 68.8%; Pred. No. 1e+03; ive 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                  Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human MDZ7 scanning oligonucleotide SEQ ID 5330.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 8; SEQ ID NO 5330; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                 1555 CTGGAGGACATCGAGG 1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADB04344 standard; DNA; 17 BP.
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                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 68.8 Matches 11, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
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ADB04344
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1998 TTTAAATCAATCATGT 2013

16 TTTAAACAATGAAGT

ВР. .

ACA08321 standard; DNA; 17

(first entry)

03-JUN-2003

ACA08321;

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alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapututic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human, ribozyme, short interfering RNA, siRNA, HER2, K-Ras,
enzymatic nucleic acid, H-Ras, N-Ras, HIV, cytostatic, anti-HIV,
anti-rheumatic, cancer, AIDS, ss.
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                                                                                                                          0.5%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 1e+03; ative 0; Mismatches 3; Indels
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                                                                                        Sequence 17 BP; 4 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Human K-Ras DNAzyme substrate #802.
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                                                                                                                                                                                               1135 ACCTCCAGCTCCACCT 1150
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06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                    1 ACTGCAAGCTCCACCT 16
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                                                                                                                                                                                                                                                                                                                            ABZ60690 standard; RNA; 17
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                                                                                                         Query Match
Best Local Similarity 81.6.
Local 13; Conservative
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The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFRS), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme configuration. The enzymein inozpharma is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent carion, especially Mg^2+. The enzymatic and antiesnse nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic, cervical, head and neck, ovarian cancer. The method involves use of other drug therapies such as monoclonal antibodies, REL-A-specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, cycloposphasmide, doxorubhi, fluorouracil carboplatin, edatrexate, gencitabine or radiation therapy. The enzymatic and antisense nucleic acid molecules are also useful for treating inflammatory disease such as
                                                                                                                                                                Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; Zinzyme; G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; lung cancer; prostate cancer; colorectal cancer; brain cancer; oecophagaal cancer; stomach cancer; bladder cancer; pancreatic cancer; cervical cancer; head and neck cancer; ovarian cancer; melanoma; lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate; gencitabine; radiation therapy; inflammatory disease; asthma; diabetes; renematoid arthritis; restenosis; Crohn's disease; obesity; ischaemia; gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis; transplant/graft rejection; reperfusion innury; glomerulonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.
                                                                                                                             Necrosis factor kappa B (NFXB) sub-unit modulating DNAzyme #90.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J, Draper KG;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         92US-00987132.
94US-00245466.
94US-00291932.
96US-00777916.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (STIN/) STINCHCOMB D T.
(MCSW/) MCSWIGGEN J.
(DRAP/) DRAPER K G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-340953/32.
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18-MAY-1994;
15-AUG-1994;
23-DEC-1996;
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Gaps

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Query Match 0.5%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 1e+03; Matches 13; Conservative 0; Mismatches 3; Indels

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obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury (central nervous system (CNS) and myocardial), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infection. This sequence represents an enzymatic nucleic acid used to modulate the function of a necrosis factor kappa B sub-unit
   rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes
8X888888X8
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Sequence 17 BP; 6 A; 5 C; 4 G; 0 T; 2 U; 0 Other;

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                        Gaps
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0
  DB 1; Length 17;
                       3; Indels
  Score 11.2; DB 1
Pred. No. 1e+03;
2; Mismatches
   0.5%;
Query Match
Best Local Similarity 68.8 Matches 11, Conservative
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1951 ACAGTGCATAAGCAGT 1966

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RESULT 11 ABT34365/

BP. ABT34365 standard; DNA; 17

ABT34365;

(first entry) 12-JUN-2003

Tumour suppression related human fukutin oligo SEQ ID No

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukucin; ds.

Homo sapiens

WO2003025175-A2.

27-MAR-2003

17-SEP-2002; 2002WO-IB004208

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES

Σ Tuijnder relerman A, Amson R,

4PI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 34; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleocides from the 17 mer sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that alignment, at least 80 % identity to the 17 mer sequence, a sequence that alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of a man of them invention are useful as probas and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the polypeptides are useful for preparation of plarmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Albreimer's disease and schizophrenia, Analysis of the expression of the I7 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these

The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breat, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ56859 - ABZ65216, ABZ65531, ABZ65520 - ABZ66524, ABZ66530 - ABZ66554, Edarget sequences for the human ribozymes of the invention

Claim 58; Page 131; 185pp; English.

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Gaps

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Query Match 0.5%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 1e+03; Matches 13; Conservative 0; Mismatches 3; Indels

Sequence 17 BP; 3 A; 5 C; 6 G; 0 T; 3 U; 0 Other;

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diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AlDS; ss.
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                                                                                                    0.5%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 1e+03;
tive 0; Mismatches 3; Indels
                                                                           Sequence 17 BP; 2 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                         1498 GAGGCCACGCTGGAGC 1513
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06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                16 GAGGCCAAGGTGGATC 1
                                                                                                                                                                                                                                                  ABZ62152 standard; RNA; 17
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                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                    Query Match
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                              Human H-Ras DNAzyme
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Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibities expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polymucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
Antisense compound; tumour necrosis factor receptor 1; liver disease;
INFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TNFR1 expression modulation related antisense oligo SEQ ID No 112.
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                                                                                                                                                                                                                                                                                                                               Zhang H,
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                                                                                                                                                                                                                                               24-OCT-2000; 2000US-00695451
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Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                             Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-583481/62.
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                                                                                                                                                                                                                                                                                                                                 Baker BF,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention provides antisense compounds targeted to human tumour necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds can be used in a method of inhibiting the expression of TNFR1 human cells or tissues. The antisense compounds specifically hybridize with one or more nucleic acids encoding TNFR1 modulating the function of nucleic acid molecules encoding TNFR1, ultimately modulating the amount of TNFR1 produced. The antisense compounds and method are useful as research reagents and diagnostics, and in the treatment and prophylaxis of infection, inflammation or tumour formation. Sequences AAZ48482-565 represent antisense oligos used for inhibition of the human TNFR1 mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                 necrosis factor receptor type 1; TNFR1; antisense; infection; nation; tumour formation; TNFR1; anticancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense inhibition of tumor necrosis factor type 1 expression for diagnosis, treatment and prevention of disease, particularly tumors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TNFR1 expression modulation related antisense oligo SEQ ID No 111.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.5%; Score 11.2; DB 1; Length 18; Best Local Similarity 81.2%; Pred. No. 1.2e+03; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                            Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18933.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 4 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 10; Col 25; 34pp; English.
                              1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABT05081 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301 CTGGAGCTGTTGGTGG 316
                                                                                                                                                                        AAZ48540 standard; DNA; 18 BP
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                                                                                                                                                                                                                                                      31-MAR-2000 (first entry)
                                                 17 GGGGTCAGCTCCCACA
                              GAGGACAGCGCCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-105333/09.
                                                                                                                                                                                                                                                                                                                                                       inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-DEC-1999.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABT05081;
                                                                                                                                                                                                             AAZ48540;
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ID ABT
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DE TNF
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Gaps

Dean NM

Zhang H,

Cowsert LM,

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(ISIS-) ISIS PHARM INC.
   BF,
   Baker
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The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor exceptor 1 (TNFRI), where the antisense compound inhibiting sexpression of TNFRI. The antisense compound is useful for inhibiting the expression of Treating an animal (preferably human) having a disease or condition associated with TNFRI, ea liver disease (such as hepatition the expression of TNFRI in a liver disease (such as hepatition injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFRI. The antisense compound is useful for disposeits, therapeutics, prophylaxis and as research reagents and kits. This polymucleotide sequence represents a human oligonucleotide relating to the TNFRI of the invention Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer. Seguence 18 BP; 0 A; 4 C; 5 G; 9 T; 0 U; 0 Other; Example 18; Page 56; 121pp; English WPI; 2002-583481/62

0.5%; Score 11.2; DB 1; Length 18; 81.2%; Pred. No. 1.28+03; vative 0; Mismatches 3; Indels 889 GIGCIGITGCCCCTGG 904 Query Match
Best Local Similarity 81.2
Matches 13; Conservative à

Grrcrerrrereries 18 ABT05036 standard; DNA; 18 RESULT 1186 ABT05036 ID ABT0 Db

(first entry) 11-OCT-2002 ABT05036;

ВР

Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; INFR1 expression modulation related antisense oligo SEQ ID No 66.

Homo sapiens

human; ds.

WO200248168-A1

20-JUN-2002

24-OCT-2000; 2000US-00695451.

22-OCT-2001; 2001WO-US051224.

(ISIS-) ISIS PHARM INC

Dean NM Zhang H, Cowsert LM, Baker BF,

WPI; 2002-583481/62.

Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNPR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

Example 10; Page 45; 121pp; English

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The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TMFM1), where the antisense compound inhibits expression of TMFM1. The antisense compound is useful for inhibiting the expression of treating an animal (preferably human) having a disease or condition associated with TMFM1. G., a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disease (such as hepatitis, or liver injury) or a hyperproliferative disease (such as hepatitis, or liver dismostics, therapeutics, prophylaxis and as research reagents and kits. This polymucleotide sequence represents a human oligonucleotide relating to the TMFM1 of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
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0.5%; Score 11.2; DB 1; Length 18;

Best Local Similarity 81.2%; Pred. No. 1.2+03;

Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                         Sequence 18 BP; 4 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
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                 8888888888888888888
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AAZ41037 standard; DNA; 18 BP 26-JAN-2000 (first entry) AAZ41037; AAZ41037,

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Gaps

o O

RESULT 1187

Cellular inhibitor of apoptosis-2 phosphorothioate antisense oligo #29 Identification; genetic target; gene modulation; human; probe; antisense oligonucleotide; phosphorothioate; PCR primer; nucleotide sequence-based technology; antisense drug discovery; target validation; ss

Homo sapiens. WO9953101-A1 Synthetic

21-0CT-1999.

99WO-US008268 13-APR-1999;

98US-0081483P. 13-APR-1998; 28-APR-1998;

(ISIS-) ISIS PHARM INC.

BG; Brooks Sasmor HM, Freier SM, Vickers TA; Cowsert LM, Baker BF, Mcneil J, Ohasi C, Wyatt JR, Borchers AH,

WPI; 1999-620446/53

Identifying compounds which modulate expression of nucleic acids, used to provide compounds having defined physical, chemical or bioactive properties, e.g. antisense activity.

Example 21; Page 101; 264pp; English.

A method has been developed of defining a set of compounds that modulate the expression of a target nucleic acid (tNA) sequence via binding of the compounds with the tNA sequence. The method comprises generating of the library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual compounds with the tNA according to defined criteria. Also described are: (1) a method of defining a set of oligonucleotides (ONS) that modulate the expression of a tNA sequence via binding of the ONS with the tNA sequence comprising generating a library of virtual compounds in silico according to defined

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention provides antisense compounds of 8-30 nucleotides that inhibit the expression of human Cellular Inhibitor of Apoptosis-2 (c-IAP-2). The antisense compounds may be used for diagnostic, therapeutics for modulating the expression of c-IAP-2), prophylaxis (e.g. to prevent or delay infection, inflammation, or tumor formation), as research and in kits. Sequences AA222103-142 represent phosphorothicate oligonucleotides used for antisense inhibition of cellular inhibitor of
criteria, and evaluating in silico the binding of the virtual ONS with the LNA according to defined criteria; and (2) a method of defining a set of compounds that modulate the expression of a LNA sequence via binding of the compounds with the LNA. The methods can be used for the generation and identification of synthetic compounds having defined physical, chemical or bioactive properties. Information gathered from assays of such compounds is used to identify nucleic acid sequences that are tractable to a variety of mucleotide sequence-based technologies, e.g. antisense drug discovery and target validation. AAZ46852 to AAZ41220, and ANY52701 to AAX52706, represent sequences used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cellular Inhibitor of Apoptosis-2; antisense; diagnostic; therapeutic; c-IAP-2; prophylaxis; infection; inflammation; tumor formation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense compounds complementary to Cellular Inhibitor of Apoptosis-2 useful for e.g. diagnostics, therapeutics, and as research reagents.
                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                       0.5%; Score 11.2; DB 1; Length 18; 81.2%; Pred. No. 1.2e+03; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human c-IAP-2 mRNA inhibiting antisense oligo ISIS #23440.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seguence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                        Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ackermann EJ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-00205144.
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                                                                                                                                                                                                                                                                                                                                   74 GAGAGGAGGGAGAGA 89
                                                                                                                                                                                                                                                                                                                                                                    18 GGGAAGAGAGAGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ22131 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-NOV-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cowsert LM,
                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                         the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-561046/47.
                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USS958771-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ22131;
                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1188
                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ22131
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The invention relates to antisense compounds targetted to a nucleic acid encoding human cellular inhibitor of apoptosis-2 (also known as C-IAP-2, apoptosis inhibitor 2, API-1, hIAP-1 and MIHC) to inhibit its expression. Antisense compounds of the invention are used to induce apoptosis in human cells or tissues to treat diseases or conditions associated with insufficient apoptosis. They are used to treat diseases or conditions associated with associated with cancer or autoimmune diseases. The invention is also useful in antisense gene therapy. The present sequence is an antisense oligonucleotide targetted to human C-IAP-2 DNA.
                                                                                                                                                                                                                                                                                                                                                             /note= "Phosphorothicate backbone, All cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                     Human, antisense; cellular inhibitor of apoptosis-2; c-IAP-2; cancer;
hyperproliferative condition; apoptosis inhibitor 2; autoimmune disease;
AFI-1; hIAP-1; MIHC; gene therapy; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound, preferably an oligonucleotide, for inhibiting expression of human Cellular Inhibitor of Apoptosis-2 in human cells or tissues, and for treating diseases, such as cancer or an autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "2'-methoxyethyl (2'-MOE) nucleotides'
                                                                                                                                                                                                                                                                                                                                                                                                                                     'note= "2'-methoxyethyl (2'-MOE) nucleotides'
                                                                                                                                                                             Human c-IAP-2 antisense oligonucleotide #ISIS #23480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 16; Page 22; 34pp; English.
                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= c
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                            /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                       base= OTHER
                                                                                             ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-SEP-1999; 99WO-US022083.
04-OCT-2001; 2001US-00857299.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-JUL-2002; 2002US-00197290.
74 GAGAGGAGGAGAGA 89
                      18 GGGAAGAGAGAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bennett CF, Ackermann EJ,
                                                                                               AAD60507 standard; DNA; 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BENN/) BENNETT C F.
(ACKE/) ACKERMANN E
(COWS/) COWSERT L M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-755119/71.
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                                                                                                                                                                                                                                                                                                               Key
modified_base
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                                                                                                                                                                                                                                                                      Homo sapiens.
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                                                                                                                                                                                                                                                                                   Synthetic.
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Gaps

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Score 11.2; DB 1; Length 18; Pred. No. 1.2e+03; 0; Mismatches 3; Indels

Query Match Best Local Similarity 81.2%; Matches 13; Conservative

Query Match Best Local

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Matches

ò d AAA85941;

RESULT 1190

AAA8594

Mammalia.

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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme [1] which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (WMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule [11] comprising a promoter operably linked to a nucleic acid segment encoding [1]. [4] can have antiposoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and vincide activities, and cleaves RNA encoding cytokine involved in inflammation. [1] can be used in gene therapy. [1] and [11] are useful for treating proliferative skin diseases such as psoriasis, atopic dermaticis, actinic keracosis, also be used for treating proliferative eye diseases such as diabetic retinopathy, virteoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn sequences used in the
                              Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; proliferations; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; demaclological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; virucide; atopic dermatilis; actinic keratosis; squamous cell carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                      basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
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hs ribozyme binding site SEQ ID NO:3527.
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Best Local Similarity 81.2
Matches 13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-300427/31.
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                                                                                                                                                                                                                                                                                                                                                    WO200130362-A2.
                                                                                                                                                                                                                                                                                          Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                 03-MAY-2001
                                                                                                                                                                                                                                                                                                               Synthetic.
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ABN86953
ID ABN86953
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AC ABN86951
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CRKI, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA88415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
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81.2%; Pred. No. 1.38+03;
Live 0; Mismatches 3; Indels
                                                 0.5%; Score 11.2; DB 1; Length 18;
81.2%; Pred. No. 1.2e+03;
vative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19 BP; 0 A; 3 C; 5 G; 11 T; 0 U; 0 Other;
         Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 100; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                               Cdc 25 hs ribozyme binding site #49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Barber JR,
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                                                                                                                                                                                                                                                                                               BP.
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                                                                                                                                         74 GAGAGGAGGAGAGA 89
                                                                                                                                                                                 18 GGGAAGAGAGAGA 3
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                                                                                                                                                                                                                                                                                               AAA85941 standard; DNA; 19
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                                                                        l Similarity 81.2
13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tritz R, Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-412314/35.
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                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2000
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Gaps

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Query Match

Matches

RESULT 1191

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AAH61103 ID AAH6 XX AC AAH6 XX DT 10-5

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Gaps

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Length 20; Indels

Score 11.2; DB 1; Pred. No. 1.5e+03; 0; Mismatches 3;

0.5%;

Query Match
Best Local Similarity 81.4...
Conservative
13; Conservative

1557 GGAGGACATCGAGGAG 1572

GGAGGAGCTGGAGGAG 18

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Human, NOVX, cytostatic, antiarteriosclerotic; cardiovascular, lymphoma, antidiabetic; immunosuppressive; neuroprotective; gene therapy, cancer; cardiomyopathy; atherosclerosis, cell signal processing, diabetes, AIDS; metabolic pathway modulation; neoplastic; neurological disorder; asthma; adenocarcinoma; prostate cancer; uterus cancer; immune response; crohn's disease; multiple sclerosis; Graft versus host disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New NOVX polypeptides and polymucleotides, useful for treating or preventing a NOVX-associated disorder or a pathological state in a subject, particularly a human, e.g. cardiomyopathy, atherosclerosis, cancer or diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                     Alsobrook JP, Lepley DM, Burgess CE, Mishra V, Li L, Padigaru M, Shimkets RA, Zerhusen BD, Spy Gerlach V, Macdougall J, Stone D, Gunther E, F
                       Human NOV7 forward PCR primer SEQ ID NO:72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2; Page 205; 227pp; Bnglish.
                                                                                                                                                                                                                                              16-OCT-2000; 2000US-0240625P.
16-OCT-2000; 2000US-0240648P.
16-OCT-2000; 2000US-0240664P.
16-OCT-2000; 2000US-0240665P.
16-OCT-2000; 2000US-0240669P.
16-OCT-2000; 2000US-0240669P.
                                                                                                                                                                                                            12-OCT-2001; 2001WO-US031922
                                                                                                                                                                                                                                                                                                                     2000US-0240732P
2000US-0241190P
                                                                                                                                                                                                                                                                                                                                              18-JAN-2001; 2001US-0262455P
29-JUL-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                      CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-444172/47.
                                                                                                                                                                                                                                                                                                                                                                                (MILL/) MILLET I.
                                                                                                                   PCR primer; ss.
                                                                                                                                                                WO200230974-A2
                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                     16-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                     Grosse WM,
Kekuda R, L
Edinger S,
                                                                                                                                                                                       18-APR-2002
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Spytek KA; Ellerman

The present invention describes novel human proteins designated NOVX (where X is 1, 2a, 2b, 2c, 2d, 3 4, 5, 6a, 6b, 7, 8, or 9). NOV1 is a tyrosine-protein kinase 6-like protein; NOV2a-d are keratin 4-like proteins; NOV3 is a collagen-like protein; NOV4 is a cystain B-like protein; NOV5 is a serotonin receptor-like protein; NOV6 and NOV65v are cold inducible glycoprotein brike protein; NOV7 is a matrilin-like protein; NOV9 is a tyrosine kinase-like protein; NOV7 is a matrilin-like protein; NOV9 is a tyrosine kinase-like protein. NOVX sequences have cytostatic, nutianteriosclerotic, cardiovascular, antidiabetic, immunosuppressive and neuroprotective activities, and can be used in Gene therapy. The NOVX sequences can be used in therapeutics, particularly for treating, sequences can be used in therapeutics, particularly a human. These disorders include cardiomyopathy, atheroselerosis, a disorder related to cell signal state in a subject, particularly a human. These disorders include cardiomyopathy, atheroselerosis, a disorder related to cell signal processing and metabolic pathway modulation or diabetes. The NOVX sequences are also useful for decembining the presence of or predisposition to a disease associated with altered levels of NOVX peoplession or nucleic acid particularly cancer. The NOVX sequences are especially useful in therapeutic or prophylactic applications for nucleic cor mucleic acid particularly cancer. The NOVX sequences are especially useful in therapeutic or prophylactic applications for neurological disorders, and in the treatment of adenocarcinoma, lymphoma, prostate cancer, uterus cancer, immune response, AlDS, asthma, Crohn's disease, multiple sclerosis or Graft versus host disease. The present sequence represents a PCR primer for human NOV7, which is used in an example from the present invention

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Tumour differentiation effecting protein TL4 related PCR primer #18
(first entry)
27-NOV-2002
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Seguence 20 BP; 7 A; 1 C; 10 G; 2 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This is the nucleotide sequence of a primer termed 2565r. A set of primers (see AAZ19971-73 and AAZ19977-95) including 2565r was used in the PCR amplification and sequencing of genomic fragments of the human uncoupling protein 2 (UCP2) gene (see AAZ19967). The invention provides a method for identifying a subject having a risk of developing obesity and/or type II diabetes mellitus by detecting the presence of a single nucleotide polymorphism in UCP2 or UCP3 nucleic acid (see AAZ19967-70)
                                                                                                                                                                                                                                                                                                                                                                                                                              Use of uncoupled protein 2 or 3 as markers for identifying subjects at risk of developing obesity or diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                    Uncoupling protein 2; UCP2; human; obesity; diabetes; diagnosis; gene therapy; PCR; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                             Human uncoupling protein 2 gene primer 2565r.
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                                                                                                                                                                                                                                                                                                                                            (MUSC-) MUSC FOUND RES DEV.
                                                                                                                                                                                                                                                                                                                                                                         Garvey WT, Argyropoulos G;
               1995/c
AAZ19995 standard; DNA; 20
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                                                                                   (first entry)
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                                                                                                                                                                                                   Homo sapiens
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                                                                                                                                                                                                                              WO9948905-A1
                                                                                  21-DEC-1999
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                                                                                                                                                                                     Synthetic
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                                                      AAZ19995
RESULT 1193
AAZ19995/c
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Sequences shown in AAV55812 to AAV55827 represent primers used in the course of the invention for the multimerisation of minimal motifs. The invention provides a method for increasing the resistence of a core protein to proteolytic degradation that comprises linking or inserting onto or into the core protein a stabilising polypeptide of formula (Glya)X(Glyb)X(Glyo)Zln where Glya, Glyb, Glyc are 1-6 sequential Gly residues and X, Y, Z are Ala, Ser, Val, Ile, Leu, Met, Phe, Pro or Throw and n can be anything between 1-66. X, Y and Z need not be identical from n repeat to n repeat. Alternatively a nucleic acid encoding a stabilising of polypeptide can be linked onto or inserted into a nucleic acid encoding a core protein. The fusion proteins of the invention are more resistant to degradation by proteases and, thus, have a longer half-life than the core protein. The products can be used for treating autoimmune classase, cancer and inflammation. In particular, the core protein may be used uses, cancer and inflammation. In particular, the core protein may be used uses, or a nitroreductase protein which can activate hitro drugs in cenzyme/product thereat cancer or other pathological conditions. The fusion proteins can also be used in diagnostic methods such as in cyrive imaging. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Epstein-Barr virus; EBV; nuclear antigen; EBVNAl; antigenic protein; clycine-rich repeat sequence; immune system; regulatory protein; enzyme; cytokine; lymphokine; cell adhesion molecule; oostimulatory molecule; drug resistance; tumour suppressant; genetic disease; viral disease; enzyme disorder; Gaucher's disease; cancer; immune system disorder; GRRS; gene therapy; minimal motif; ds.
                                                                                               New fusion proteins resistant to proteolytic degradation - comprising a core protein with a stabilising polypeptide comprising a peptide sequence
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81.2%; Pred. No. 1.8e+03;
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/note= "5' overhang of TTCC"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimal motif coding sequence ZGS1/ZGS2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "5' overhang"
complement(24)
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                                                                                                                                                                                        Disclosure, Page 72, 120pp, English.
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                                                                                                                                                containing glycine repeats.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             al Similarity 81.2
13; Conservative
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                                                        WPI; 1998-312463/27
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                  Masucci MG;
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Best Local S
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to plasmic change agents with cell differentiation activity containing protein TL4. These can be used in the treatment, prevention and diagnosis of rhabdosarcoma, leiomyosarcoma, muscular dystrophy and uterine myeloma. The present sequence is a PCR primer used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Plasmic change agents and antibodies to them for diagnosis and treatment of tumours of muscle tissue and of muscular dystrophy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fusion protein; stabilising polypeptide; proteolytic degradation, resistance; half-life; autoimmune disease; inflammation; nitro drug; Ikappas regularor protein; inflammatory bowel disease; in vivo imaging; nitroreductase protein; enzyme therapy; prodrug therapy; protease; cancer; pathological condition; minimal motif; PCR primer; ss.
  Mouse; tumour differentiation; rhabdosarcoma; leiomyosarcoma; rat; ss;
muscular dystrophy; uterine myoma; cytostatic; plasmic change; TL4;
human; PCR; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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81.2%; Pred. No. 1.6e+03;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Multimerisation of minimal motifs using primer ZGE2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 1 A; 5 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 127; 136pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                     Hikichi Y, Shintani Y, Matsui H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        889 GTGCTGTTGCCCTGG 904
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                                                                                                                                                                                                                                                                                   23-FEB-2001; 2001JP-00049450.
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97US-0048945P.
                                                                                                                                                                                                                                            21-FEB-2002; 2002WO-JP001536.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 81.2'
Matches 13, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MASU/) MASUCCI M G.
                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-674894/72.
                                                                                                                                                       WO200266049-A1.
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                                                                                                           Unidentified
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18-NOV-1998
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RESULT 1195

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The invention relates to identifying (M1) genes in vitro that, in humans or animals, are important for skin ageing and/or skin stress by serial analysis of gene expression between mixtures of transcribed and optionally translated, genetically encoded factors (A) obtained from young and aged skin, to identify that genes that show strong differential useful for: identifying markers of skin ageing and/or stress; (M1) is useful for: identifying markers of skin ageing and/or stress; determining skin ageing and/or stress; and identifying or determining the effects of pharmacountical or comentic agents for control of skin ageing. The present sequence is one of a group of human skin ageing/stress related expressed sequence tags (ABQ87680) of the invention
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identifying genes involved in skin stress and aging, useful e.g. in screening for cosmetic or therapeutic agents, based on differential gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In vitro identification of skin-expressed genes, useful for determining homeostasis and identifying cosmetic or pharmaceutical agents against e.g. skin cancer.
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100.0%; Pred. No. 3.1e+02;
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                                                                                                                                                Claim 8; Page 91; 325pp; German.
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Best Local Similarity 100.
Matches 11; Conservative
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                                                screening
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               New proteins containing GRRS which are invisible to the immune system -
used for treating cancer, immune system disorders, viral diseases, etc.
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                                                                             95SE-00001324.
95US-00522995.
95US-00529190.
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              96WO-GB000876
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P-PSDB; AAW05706.
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                                                                                                                                                                                                                          (MASU/) MASUCCI M.
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                                                                             10-APR-1995;
01-SEP-1995;
15-SEP-1995;
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              10-APR-1996;
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The invention relates to in vitro identification (M1) of genes expressed in the skin of humans or animals by subjecting a mixture of genetically encoded factors from skin, to serial analysis of gene expression (SAGE) so as to identify skin-expressed genes and quantify their expression.

(M1) is useful for identifying genes involved in skin homeostasis; to promotes skin homeostasis and to test agent (A) that maintains or promotes skin homeostasis or that can be used for treating skin disorders, specifically neurodermatitis; sunburn, psoriasis, scleroderma; ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus; soscea, malanoma; basal cell carcinoma, and carcinoma or sarcoma of the skin. The present sequence is that of a human expressed sequence tag (BST) of the invention
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                                                                                                                ВР.
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                                                                                                                ABV64863 standard; cDNA; 11
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  11 GCACCTGCCAT 1
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ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus; rosace; melanoma; basal cell carcinoma; and carcinoma or sarcoma of skin. The present sequence is that of a human expressed sequence tag (EST) of the invention
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                                                                                                                                                          Query Match 0.5%; Score 11; DB 1; Length 11; Best Local Similarity 100.0%; Pred. No. 3.1e+02; Matches 11; Conservative 0; Mismatches 0; Indels
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                                                                                                                Sequence 11 BP; 3 A; 3 C; 5 G; 0 T; 0 U; 0 Other;
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(HENK) HENKEL KGAA.

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The invention relates to in vitro identification (M1) of genes expressed in the skin of humans or animals by subjecting a mixture of genetically encoded factors from skin, to serial analysis of gene expression (SAGE) so as to identify skin-expressed genes and quantify their expression. (M1) is useful for identifying genes and quantify their expression of determine skin homeostasis and to test agent (A) that maintains or promotes skin homeostasis and to test agent (A) that maintains or disorders, specifically neurodermatitis, sunburn; psoriasis; scleroderma; ichthyosis, atopic dermatitis, acne, seborrhea; lupus erythematosus; rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the skin. The present sequence is that of a human expressed sequence tag
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                                                                                                                                                                                                                                                                                                                                  In vitro identification of skin-expressed genes, useful for determining homeostasis and identifying cosmetic or pharmaceutical agents against e.g. skin cancer.
Human; skin; dermatological; vulnerary; antipsoriatic; antiseborrhaeic; immunosuppressive; antiinflammatory; cytosratic; SAGB; neurodermatitis; psoriasis; dermatitis; skin cancer; BST; expressed sequence tag; ss.
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The invention relates to in vitro identification (M1) of genes expressed in the skin of humans or animals by subjecting a mixture of genetically schooled from skin, to scrial analysis of gene expression (SAGE) so as to identify skin-expressed genes and quantify their expression.

(M1) is useful for identifying genes involved in skin homeostasis; to determine skin homeostasis and to test agent (A) that maintains or promotes skin homeostasis or that can be used for treating skin disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma; inchthyosis; atoppt dermatitis; acnes; sebornhea; lupus errythematosus; rosaces; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the skin. The present sequence is that of a human expressed sequence tag
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                                                                                                        In vitro identification of skin-expressed genes, useful for determining homeostasis and identifying cosmetic or pharmaceutical agents against
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                                                                                                                                                                           Disclosure; Page 230; 1345pp; German.
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                                           Hofmann
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                                             Petersohn D, Conradt
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Sequence 11 BP; 3 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

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The invention relates to in vitro identification (MI) of genes expressed in the skin of humans or animals by subjecting a mixture of genetically encoded factors from skin, to serial analysis of gene expression (SAGE) so as to identify skin-expressed genes and quantify their expression.

(MI) is useful for identifying genes involved in skin homeostasis; to determine skin homeostasis and to test agent (A) that maintains or promotes skin homeostasis or that can be used for treating skin disorders, specifically neurodermatitis; sunburn, psoriaais, scleroderma; ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus; rosacea, melanoma; basal cell carcinoma; and carcinoma or sarcoma of the skin. The present sequence is that of a human expressed sequence tag
The invention relates to in vitro identification (M1) of genes expressed in the skin of humans or animals by subjecting a mixture of genetically encoded factors from skin, to serial analysis of gene expression (SAGE) so as to identify skin-expressed genes and quantify their expression. (M1) is useful for identifying genes involved in skin homeostasis or determine skin homeostasis and to test agent (A) that maintains or promotes skin homeostasis or that can be used for treating skin ichthyosis; specifically neurodermatitis; sunburn, psoriasis, scleroderma; ichthyosis; atopic dermatitis; acne; sebornhea; lupus erythematosus; rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the skin. The present sequence is that of a human expressed sequence tag (EST) of the invention
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The invention relates to novel methods for the extraction of variable number tandem repeat (WNTR) alleles and utilising the alleles as genetic markers. One method comprises of making a mixture of WNTR alleles and their flanking regions from the genomic DNA of one or more members of a species of interest by: (i) ligating an adapter to genomic DNA fragments of the the 3' end of the adapter-terminated fragment is blocked to prevent chain extension; (ii) using the adapter-terminated fragments with adapter-primers and WNTR sense and antisense primers to generate 3'- and 5'-flanking WNTR median (iii) using the adaptimers as primers to extend on genomic DNA as the template and create the desired mixture of WNTR alleles and their flanking regions; The alleles generated by the methods can be used for genetic fingerprinting by gel electrophoresis or for other methods of genotyping individuals or selecting markers that segregate with specific traits. The present sequence represents an oligonucleotide used to prepare an adapter used to exemplify a method of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Use of isolated variable number tandem repeat alleles and their flanking regions - for genetic fingerprinting or other methods of genotyping individuals.
                                                                                                                                                                                                                                                                                                                        Variable number tandem repeat, VNTR; allele, genetic marker, adapter, genetic fingerprinting, gel electrophoresis, genotyping, ss.
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ive 0; Mismatches 0; Indels
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100.0%; Pred. No. 3.1e+02;
iive 0; Mismatches 0;
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RESULT 1206

AAA06763

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The present invention relates to inhibiting growth of human tumour cells, by administering an anti-neoplastic agent and a monoclonal antibody to a human cancer patient. The antibody binds to the extra-cellular domain of the human epidermal growth factor (BGP) receptor of the tumour cell and inhibits binding of EGF to it. It is not conjugated to the anti-neoplastic agent. The antibodies and anti-neoplastic agents are useful for inhibiting the growth of human tumour cells that express human EGF receptors and are mitogenically stimulated by human EGF in association with a pharmaceutical carrier. The invention combines two anti-cancer agents, each operating via a different mechanism of action to yield a cytotoxic response to human tumour cells. The present sequence is 5, end of coding region of immunoglobulin (Ig) 108VH (heavy chain variable
                                   Tumour; anti-neoplastic agent; monoclonal antibody; cancer; cytostatic;
extra-cellular domain; human epidermal growth factor; EGF receptor; IG;
cytotoxic response; immunoglobulin; 108VH; heavy chain variable region;
human; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic oligonucleotide, dinucleotide repeat, cytostatic, apoptosis, cell cycle arrest, cell proliferation; caspase, cytokine, interleukin, tumour necrosis factor, TNF, cancer, carcinoma, sarcoma, leukemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Inhibition of growth of human tumor cell, involves administering anti-
neoplastic agent and monoclonal antibody to human cancer patient.
end of coding region of human 108VH expression vector construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 11; DB 1; Length 12;
100.0%; Pred. No. 4.1e+02;
Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ricca GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seguence 12 BP; 3 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         D, Bellot F, Kris R,
                                                                                                                                                                                                                                                                                                                                                                                                                                            (RHON ) RHONE-POULENC RORER INT HOLDINGS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      region) expression vector construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 10D; Fig 8; 36pp; English.
                                                                                                                                                                                                                                                                                                                             88US-00244737.
89US-00319109.
91US-00760852.
93US-00086411.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          照.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAH46047 standard; DNA; 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Schlessinger J, Givol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-281047/29.
                                                                                                                                                                                               US6217866-B1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lymphoma; ss
                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                       07-JUN-1995;
                                                                                                                                                                                                                                                                                                                        15-SEP-1988;
                                                                                                                                                                                                                                                                                                                                                       03-MAR-1989;
                                                                                                                                                                                                                                                                                                                                                                                               29-JUN-1993;
                                                                                                                                                                                                                                            17-APR-2001.
                                                                                                                                                                                                                                                                                                                                                                            17-SEP-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            South VJ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes oligomucleotides (I) of 10-15 residues corresponding to a part of a vascular endothelial growth factor (VEGF) comprising 1 of 6 sequences given in AAA06692 to AAA06693. AAA06698 to AAA06783 represent VEGF antisense oligomucleotides used in the exemplification of the present invention. The antisense oligomucleotides from the present invention have cytostatic and analysiogenic activities, and can be used in gene therapy. The oligomucleotides are useful for inhibiting the expression of VEGF, e.g. for the treatment of diseases associated with abhormal vascular permeability, cell proliferation, cell permeation, angiogenesis, neovascularisation, tumour cell growth and/or metastasis. AAA06784 represents a human VEGF nucleotide sequence from which the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel oligonucleotides corresponding to a part of a vascular endothelial growth factor, useful for treating e.g. tumor cell growth and/or
                                                                                                                                                                                                                                     Human; vascular endothelial growth factor; VEGF; phosphorothioate; antisense oligonucleotide; inhibition; cytostatic; angiogenic; gene therapy; abnormal vascular permeability; cell proliferation; cell permeation; angiogenesis; neovascularisation; tumour cell growth;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                             VEGF derived short antisense oligonucleotíde SEQ ID NO:72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.5%; Score 11; DB 1; Length 12; 100.0%; Pred. No. 4.1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ulhmann E, Peyman A, Bitonti AJ, Woessner RD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HMRI ) HOECHST MARION ROUSSEL DEUT GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 17; 73pp; English.
                                                           AAA06763 standard; DNA; 12 BP.
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                                                                                                                                                                                                                                                                                                                               metastasis; ss
                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-AUG-1998;
                                                                                                                                                  05-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-AUG-1998;
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metastasis.

Query Match Best Local S Matches 11

AAD04023;

SAXEX SAXEX

1207

RESULT 1

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Cheadle

16-FEB-2000 EP979869-A1

Synthetic.

caspases

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide primer SEQ ID NO 291807 for detecting SNP TSC0014939.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     oer or oligonucleotides, useful for diagnosis and cell typing, i
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 327640; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.5%; Score 11; DB 1; Length 12; 100.0%; Pred. No. 4.1e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 12 BP; 2 A; 6 C; 0 G; 4 T; 0 U; 0 Other;
                                                                   Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABH91814 standard; DNA; 12 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-APR-2000; 2000DE-01019173.
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Best Local Similarity 100.
Matches 11; Conservative
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                                                                Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12 AAGTGGGAGGA 2
                   (EPIG-) EPIGENOMICS AG.
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                                                                                                             WPI; 2001-657177/75
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                                                                   olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1210
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence is that of a synthetic oligonucleotide useful to the invention. The invention relates to a composition, comprises multiple aseas. 'OH, S-'OH, S-'OH synthetic oligonucleotide which comprises multiple repeats of dinucleotides such as GT. TG, etc., according to specific formula and having cytostatic activity. The oligonucleotide compositions are useful for inducing cell cycle arrest, inhibition of proliferation, activation of caspases and induction of apoptosis or production of cyclotines such as interlemin (II)-1.beta, IL-6, IL-10, IL-12 and tumour necrosis factor (TMP)-alpha by immune system cells, in an animal having cancer such as primary carcinoma, secondary carcinoma, primary sarcoma and secondary sarcoma such as, laukemia, lymphoma, breast, prostate, colorectal, ovarian or bone cancer. The compositions induce apoptosis independent of Fas, p53/p21, p21/waf-1/CIP, p15(ink4B), p16(ink4), drug resistance, caspase 3, transforming growth factor (TGF)-beta 1 receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                      Composition comprising synthetic oligonucleotides which comprise multiple repeats of dinucleotides such as GT, TG useful for treating cancer by inducing cell cycle arrest, inhibiting proliferation, activating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP; single nuclectide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Pred. No. 4.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 12 BP; 0 A; 0 C; 10 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 19; Page 32; 77pp; English.
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100.0%; Pred
0; M
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                                                                                                                                                                                                                                (BION-) BIONICHE LIFE SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-APR-2000; 2000DE-01019173.
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                                                                                                                                                             99US-0170325P
                                                                                                             .2-DEC-2000; 2000WO-CA001467
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Best Local Similarity 100.
Matches 11, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1092 CACCCCCACC 1102
                                                                                                                                                                                                                                                                             Filion MC;
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                        WO200144465-A2.
                                                                                                                                                                                                                                                                             Phillips NC,
                                                                                                                                                                                   29-AUG-2000;
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                                                                                                                                                             13-DEC-1999;
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                                                                   21-JUN-2001
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ABI27667;

RESULT 1209 AB127667

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Gaps

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Tue Mar

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BP; 2 A; 9 C; 0 G; 1 T; 0 U; 0 Other;

Sequence 12

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PMA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligoners are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 tapeses the oligoners described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
      88666666666668888
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Sequence 12 BP; 2 A; 5 C; 0 G; 5 T; 0 U; 0 Other;

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Query Match
0.5%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 4.1e+02;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                              928 TTATCCCTCCT 938
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Oligonucleotide primer SEQ ID NO 345534 for detecting SNP TSC0044077.
     AB145561 standard; DNA; 12
                22-FEB-2002 (first entry)
          ABI45561;
RESULT 1211
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

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WO200177384-A2.
                             18-OCT-2001.
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06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K; WPI; 2001-657177/75. Claim 1; SEQ ID NO 345534; 29pp + Sequence Listing; German.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99889, ABF00010-ABB99889, ABF00010-ABB99889 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                   Oligonucleotide primer SEQ ID NO 275485 for detecting SNP TSC0003907.
                  Gaps
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0.5%; Score 11; DB 1; Length 12; 100.0%; Pred. No. 4.1e+02; ive 0; Mismatches 0; Indels
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ID ABH75494 standard; DNA; 12 BP.
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                                    1091 TCACCCCCACC 1101
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          Local Similarity
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  Query Match
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosite methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at Claim 1; SEQ ID NO 275485; 29pp + Sequence Listing; German. Sequence 12 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

(EPIG-) EPIGENOMICS AG

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0.5%; Score 11; DB 1; Length 12; 100.0%; Pred. No. 4.1e+02; tive 0; Mismatches 0; Indels
    Ouery Match 0.5
Best Local Similarity 100.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                 Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 291077; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contran envous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABF00010-ABF9989 and ABI0010-ABI87073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                            Oligonucleotide primer SEQ ID NO 308635 for detecting SNP TSC0023137.
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100.0%; Pred. No. 4.1e+02;
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 ABI08662 standard; DNA; 12
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RESULT 1214 ABH91084/c

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Length 12; 0; Indels

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABF00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 353221; 29pp + Sequence Listing; German.
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WPI; 2001-657177/75
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                                                                  992 TTGTTTGTGGG 1002
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22-FEB-2002 (first entry)

ABI17147;

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ABH76801 standard; DNA; 12 BP. (first entry) 22-FEB-2002 ABH76801;

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide primer SEQ ID NO 276794 for detecting SNP TSC0004288.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 276794; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory,

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central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99939, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00100-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fitted specification, but ftp.wipo.int/pub/published_pot_sequence
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonuclectide primer SEQ ID NO 317120 for detecting SNF TSC0027817. Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status. Claim 1; SEQ ID NO 317120; 29pp + Sequence Listing; German. Berlin K; 06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173 Piepenbrock C, (EPIG-) EPIGENOMICS AG. WPI; 2001-657177/75. WO200177384-A2. Homo sapiens. 19-OCT-2001. olek A,

This invention describes novel oligonucleotide primers or peptide nucleic acid (PMA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 12 BP; 3 A; 0 C; 6 G; 3 T; 0 U; 0 Other;

ftp.wipo.int/pub/published_pct_sequences

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, oligomers are also used for detecting cell type differentiation. ABC09010-ABC99989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formet from WIPO at
                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and merabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but typ.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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             Oligonucleotide primer SEQ ID NO 320936 for detecting SNP TSC0029979.
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cive 0; Mismatches 0; Indels
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RESULT 1222
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                                                                                                                                                                           This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligonuclectide primer SEQ ID NO 348705 for detecting SNP TSC000193.
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                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                         Claim 1; SEQ ID NO 271281; 29pp + Sequence Listing; German.
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0.0%; Pred. No. 4.1e+02;
0. Mismatches 0; Indels
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                                                                   Berlin K;
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06-APR-2001; 2001WO-IB000713
                      07-APR-2000; 2000DE-01019173
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                                                                  Piepenbrock C,
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                                            (EPIG-) EPIGENOMICS AG
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                                                                                         WPI; 2001-657177/75
                                                                                                                                     methylation status.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and eytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE99989, ABF00010-ABE99989, ABH00010-ABE99989 and ABI00010-ABE3073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
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                                                        This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contrain nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Claim 1; SEQ ID NO 348705; 29pp + Sequence Listing; German.
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100.0%; Pred. No. 4.1e+02;
ive 0; Mismatches 0; Indels
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nes 11; Conservative
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ABI63498 standard; DNA; 12 BP.

ABI63498

(first entry)

22-FEB-2002

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ABI63498;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genemic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for deceting call type differentiation. ABC00010-ABC99889, ABF00010-ABF99989 and metabolic disorders. The represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                   Sequence 12 BP; 2 A; 9 C; 0 G; 1 T; 0 U; 0 Other;
was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                              100.0%; Pred. No.
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Best Local Similarity 100.0
Matches 11, Conservative
                                                                                                      Local Similarity 100.0
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Matches
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943 ATTGGTTTAAT 953

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12 ATTGGTTTAAT

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 tepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                   Oligonucleotide primer SEQ ID NO 363471 for detecting SNP TSC0053873.
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Best Local Similarity 100.
Matches 11; Conservative
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olek A,

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Berlin K;
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            Olek A, Piepenbrock C,
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                                                                                        designed to detect a methylation status.
                                         WPI; 2001-657177/75
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                                                                                                                                                                                                                                                                                                                                                                                     This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABF99899, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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 central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                  WO200177384-A2.
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                                      Homo sapiens.
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Query Match

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
                                                                                                                                                                                                                             This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pcr_sequences
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of oligonucleotides, useful for diagnosis and cell typing, is igned to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                    Claim 1; SEQ ID NO 297620; 29pp + Sequence Listing; German.
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This invention describes novel oligomucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABC0010-ABF99999, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; Ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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0.5%; Score 11; DB 1;
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tive 0; Mismatches
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       and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastroinfestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABF900010-ABF9989, ABF9989, ABF900010-ABF9989, ABF9
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ftp.wipo.int/pub/published_pct_sequences
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Homo sapiens.

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH0010-ABF99989 and ABI0010-ABF32073 trepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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                    18-OCT-2001.
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                                                                                                                                                                                                           olek A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC09989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                  SND; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                             Oligonucleotide primer SEQ ID NO 326738 for detecting SNP TSC0033256.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABI44106 standard; DNA; 12 BP.
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22-FEB-2002

ABI44106;

RESULT 1231

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ABI44106

Query Match

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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Claim 1; SEQ ID NO 348541; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genemic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABH99999 and ABI00010-ABH82073 data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at

Sequence 12 BP; 5 A; 0 C; 5 G; 2 T; 0 U; 0 Other;

Gaps ò 0.5%; Score 11; DB 1; Length 12; 100.0%; Pred. No. 4.1e+02; ative 0; Mismatches 0; Indels Query Match 0.5 Best Local Similarity 100. Matches 11; Conservative

983 TCTACTCCATT 993 TCTACTCCATT 2 à ద

RESULT 1233 ABH98002

ABH98002 standard; DNA; 12 BP.

ABH98002;

22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 297995 for detecting SNP TSC0017864.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 297995; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of ancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABCO0010

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-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTR: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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100.0%; Pred. No. ...
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Best Local Similarity 100.(
Matches 11, Conservative
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1016 AAAAAGAGGGG 1026 12 AAAAAGAGGG 2 ò

RESULT 1234 ABI75143

ABI75143 standard; DNA; 12 BP.

ABI75143;

(first entry) 22-FEB-2002

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Oligonucleotide primer SEQ ID NO 375116 for detecting SNP TSC0061074.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 375116; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic discorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09089, ABF00010-ABF90899, ABF00010-ABF90989, ABF00010-ABF90989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pot_sequences

Sequence 12 BP; 5 A; 0 C; 4 G; 3 T; 0 U; 0 Other;

Gaps . 0 Query, Match 0.5%; Score 11; DB 1; Length 12; Best Local Similarity 100.0%; Pred. No. 4.1e+02; Matches 11; Conservative 0; Mismatches 0; Indels

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856 AATGTTAAGGG 866

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide primer SEQ ID NO 357917 for detecting SNP TSC0050872.
                                                                                                                                        Oligonucleotide primer SEQ ID NO 380268 for detecting SNP TSC0010746.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                     Berlin K;
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                                                                    ABI80295 standard; DNA; 12 BP.
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            AATGTTAAGGG 12
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Matches 11; Conserv
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SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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100.0%; Pred. No. 4.1e+02;
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Matches
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                                                                                                                                                                                   This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide primer SEQ ID NO 302602 for detecting SNP TSC0020077.
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13
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                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.5%; Score 11; DB 1; Length 12; Best Local Similarity 100.0%; Pred. No. 4.1e+02; Matches 11; Conservative 0; Mismatches 0; Indels
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                                                      Berlin K;
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07-APR-2000; 2000DE-01019173
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                                                    Piepenbrock C,
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                          (EPIG-) EPIGENOMICS AG
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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100.0%; Pred. No. 4.1e+02;
ive 0; Mismatches 0;
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nes 11; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                         Oligonucleotide primer SEQ ID NO 274931 for detecting SNP TSC0003733.
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100.0%; Pred. No. 4.1e+02;
ive 0; Mismatches 0; Indels
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                   ABH74944 standard; DNA; 12 BP.
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Best Local Similarity 100.0
Matches 11, Conservative
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ABI45550
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                            Gaps
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                                                        Score 11; DB 1; Length 12;
Pred. No. 4.1e+02;
0; Mismatches 0; Indels
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            Sequence 12 BP; 3 A; 7 C; 0 G; 2 T; 0 U; 0 Other;
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                                                      Query Match 0.5%; Sco
Best Local Similarity 100.0%; Pr
Matches 11; Conservative 0;
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Homo sapiens.

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ABI14479;

RESULT 1240

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Query Match

Local

Matches

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RESULT 1241

Homo sapiens

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABF99999, ABH00010-ABF99999, ABH00010-ABF99999 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                       Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                            Claim 1; SEQ ID NO 379202; 29pp + Sequence Listing; German.
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100.0%; Pred. No. 4.1e+02;
tive 0; Mismatches 0; Indels
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Best Local Similarity 100.
Matches 11, Conservative
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                 WPI; 2001-657177/75
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designed to detect single-nucleotide polymorphisms and cytosine
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100.0%; Pred. No. 7...
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methylation status.
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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00100-ABF9989, ABF00100-ABF9989, ABF00100-ABF99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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0.5%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 4.1e+02;
Matches 11; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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ABI07454 standard; DNA; 12
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Matches 11; Conservative
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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Berlin K;

Olek A, Piepenbrock C,

WPI; 2001-657177/75.

(EPIG-) EPIGENOMICS

06-APR-2001; 2001WO-IB000713. 07-APR-2000; 2000DE-01019173 Claim 1; SEQ ID NO 308634; 29pp + Sequence Listing; German.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, acadiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                      Oligonucleotide primer SEQ ID NO 331048 for detecting SNP TSC0035936.
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designed to detect single-nucleotide polymorphisms and cytosine
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(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Matches 11, Conservative
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

WO200177384-A2 Homo sapiens

18-OCT-2001.

Oligonucleotide primer SEQ ID NO 308634 for detecting SNP TSC0023137.

(first entry)

22-FEB-2002

ABI08661;

ABI08661 standard; DNA; 12 BP.

RESULT 1248

ABI08661

1247 CCGACCCCATC 1257 11; Conservative

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Matches

printed specification, but

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Sequence 12 BP; 0 A; 0 C; 6 G; 6 T; 0 U; 0 Other;
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                                                   This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABF82073 tepseson the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE09989, ABE00010-ABE9989, ABH0010-ABE9989 and ABI00010-ABE92073 represent the oligomers described in the invention. NOTE: The sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                         Claim 1; SEQ ID NO 329697; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                 0.5%; Score 11; DB 1; Length 12; 100.0%; Pred. No. 4.1e+02; tive 0; Mismatches 0; Indels
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                                                                                                                                                                                                was obtained in electronic format from WI ftp.wipo.int/pub/published_pct_sequences
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methylation status
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The present invention relates to a method for identifying a microorganism by performing gel electrophoresis of random PCR amplicons in the presence of standard DNA. The method comprises the production of several double-stranded DNA fragments by random PCR, using at least part of the genome of the test organism as template, and their separation by temperature-continuous production of several double.

The featuring standard DNA fragment and a pattern continuous production of semi-distances are determined for similarity score (PaSS) and/or genomic semi-distances are determined for similarity score (PaSS) and/or genomic semi-distances are determined for continuous point for the identification dots and the pseudo-absolute location of the identification dots is determined from its position relative to the standard. The method is useful to identify the species of a microorganism or its homology. The method is more accurate than methods based on phenotype or analysis of 16s rRNA sequences, but simpler and more practical than (whole) genome comparisons. The use of standard DNA allows commalisation of electrophoreric patterns by making possible commanisation of the melting starting point, the slowest dot and the single-strand conversion dot ('featuring' points). AAS18622-AAS18666

represent PCR primers used to generate double stranded DNA fragments by conversion of the methods of the present invention
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polymerase chain reaction amplicons in presence of standard DNA and image
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data for this patent did not form part of the pass obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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Best Local Similarity 100.
Matches 11; Conservative
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21-FEB-2002
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14.6%; Pred. No. 5.3e+02;
ve 1; Mismatches 1; Indels
              ch 0.5%; Score 11; DB 1; Length 12; 1 Similarity 100.0%; Pred. No. 4.1e+02; 11; Conservative 0; Mismatches 0; Indels
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Best Local Similarity 84.6%;
Matches 11; Conservative
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ID ABF16913 standard; DNA; 13
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                                                  Oligonuclectide SEQ ID NO 116910 for detecting SNP TSC0029263.
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Pred. No. 5.3e+02;
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(first entry)
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WPI; 2001-657177/75.
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                              Berlin K;
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Best Local Similarity 100.
Matches 11, Conservative
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Olek A, Piepenbrock C,

WPI; 2001-657177/75

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The
                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and merabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                  Claim 1; SEQ ID NO 124104; 29pp + Sequence Listing; German
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100.0%; Pred. No. 5.38+02;
tive 0; Mismatches 0; Indels
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This invention describes novel oligonucleotide primers or peptide mucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABF00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but firm wipo int/pub/published_pct_sequences
oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF0010-ABF99889, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire wipo.int/pub/published_pot_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                    Sequence 13 BP; 5 A; 6 C; 0 G; 2 T; 0 U; 0 Other;
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metebolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Best Local Similarity 100."
Matches 11, Conservative
1254 CATCCCCAACC 1264
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ABF96108
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ABF96109/c
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE99989, ABF00010-ABE99989, ABH00010-ABE99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPD at
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100.0%; Pred. No. 5.3e+02;
ive 0; Mismatches 0; Indels
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Best Local Similarity 100.
Matches 11; Conservative
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ABF78022
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                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonucleotide SEQ ID NO 196106 for detecting SNP TSC0048263.
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06-APR-2001; 2001WO-IB000713.

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Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 U; 0 Other;

ftp.wipo.int/pub/published_pct_sequences

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABH99989 and ABI00010-ABH82073 tepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but fftp.wipo.int/pub/published_pct_sequences
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Claim 1; SEQ ID NO 178019; 29pp + Sequence Listing; German.
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Query Match 0.5%; Score 11; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 5.3e+02; Matches 11; Conservative 0; Mismatches 0; Indels
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RESULT 1264

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                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                         Oligonucleotide SEQ ID NO 116439 for detecting SNP TSC0029146.
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34.6%; Pred. No. 5.3e+02;
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This invention describes novel oligonucleotide primars or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genemic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at
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designed to detect single-nucleotide polymorphisms and cytosine
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84.6%; Pred. No. 5.3e+02;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                      Claim 1; SEQ ID NO 197140; 29pp + Sequence Listing; German.
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  Berlin K;
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oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Best Local Similarity 100.0%; Pred. No. 5.3e+02;
Matches 11; Conservative 0; Mismatches 0;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides en used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99389, ABF00010-ABE9989, ABF00010-ABE9989, ABF00010-ABE99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                         Oligonucleotide SEQ ID NO 190457 for detecting SNP TSC0000398.
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nes 11; Conservative 0; Mismatches
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                                                                                                     (EPIG-) EPIGENOMICS AG.
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18-OCT-2001
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central herrous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 aABC00010 ABC00010 ABIS2073
                                                                                              This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPD at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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to detect single-nucleotide polymorphisms and cytosine
designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide SEQ ID NO 74730 for detecting SNP TSC0019197.
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                                                             Claim 1; SEQ ID NO 46726; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                          Length 13;
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100.0%; Pred. No. 5.3e+02;
iive 0; Mismatches 0;
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Matches 11; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and oytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from NIPO at fire who int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                   SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               set or oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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100.0%; Pred. No. 5.3e+02;
tive 0; Mismatches 0; Indels
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13 GAGAATGTTAA
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  represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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100.0%; Pred. No. 5.3e+02;
ive 0; Mismatches 0; Indels
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Best Local Similarity
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genemic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABH99999 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Best Local Similarity 84.6
Matches 11; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABH00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo int/pub/published_pct_sequences
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                     Claim 1; SEQ ID NO 72610; 29pp + Sequence Listing; German.
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100.0%; Pred. No. 5.3e+02;
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                                                  Piepenbrock C,
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                (EPIG-) EPIGENOMICS AG.
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Sequence 13 BP; 1 A; 0 C; 3 G; 8 T; 0 U; 1 Other;

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC09989, ABC0010-ABF9989, ABC0010-ABF9989 and ABI00010-ABF99807 are essent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The coligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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to detect single-nucleotide polymorphisms and cytosine
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84.6%; Pred. No. 5.3e+02;
ative 1; Mismatches 1; Indels
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100.0%; Pred. No. 5.3e+02;
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RESULT 1281 ABC91351

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPD at
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                                                                                                                                                Oligonucleotide SEQ ID NO 91368 for detecting SNP TSC0022885.
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ABC91351 standard; DNA; 13
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                                                                                                             This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                      Claim 1; SEQ ID NO 219468; 29pp + Sequence Listing; German.
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central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF89989, ABH00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at figure int/pub/published_pot_sequences
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0.5%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 5.3e+02;
Matches 11; Conservative 0; Mismatches 0; Indels
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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930 ATCCCTCTCT 940
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                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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         Oligonucleotide SEQ ID NO 39960 for detecting SNP TSC0012178.
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Best Local Similarity 100.0%; Pred. No. 5.3e+02;
Matches 11; Conservative 0; Mismatches 0; Indels
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ABC39943 standard; DNA; 13

RESULT 1287

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Berlin K;
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                                                                                                                                                                                       This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE9989, ABR00010-ABE9989, ABH00010-ABH99989 and ABI00010-ABI82073 data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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84.6%; Pred. No. 5.3e+02;
ve 1; Mismatches 1; Indels
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Matches 11; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastroinfestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABR00010-ABR99989, ABR00010-ABR9989, ABR0010-ABR9989, ABR001010-ABR9989, ABR00101010-ABR9989, ABR001010-ABR9989, ABR001010-ABR9989, ABR001010-ABR9989, ABR001010-ABR9989, ABR001010-ABR9989, ABR001010-ABR9989, ABR001010-ABR9989, ABR001010-ABR9989, ABR001010-ABR9989, ABR0010101-ABR9989, ABR001010-ABR9989, ABR001010-ABR9989, ABR001010-ABR9999, ABR001010-ABR9999, ABR001010-ABR9999, ABR0010101-ABR9999, ABR001010-ABR9999, ABR0010101-ABR9999, ABR00010101-ABR9999, ABR0010101-ABR9999, ABR00010101-ABR9999, ABR00010101-ABR9999, ABR00010101-ABR9999, ABR00010101-ABR9999, ABR00010101-ABR9999, ABR00010101-ABR9999, ABR00010101-ABR9999, ABR00010101-ABR9999, ABR0001010101-ABR9999
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Claim 1; SEQ ID NO 126369; 29pp + Sequence Listing; German.
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Query Match Best Local

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Matches

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RESULT 1291 ABF73362/c

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically prerreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic diseoders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABC0010-ABE9989, ABH0010-ABH999989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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0.5%; Score 11; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 5.3e+02;

Matches 11; Conservative 0; Mismatches 0; Indels
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at
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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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central nervous system; gastrointestinal; respiratory; immune; metabolic.

Length 13;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and oytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99889, ABF00010-ABF99889, ABH00010-ABF99899, ABH00010-ABF99899 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligoners are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF0010-ABF99899, ABF00010-ABF99899, ABF00010-ABF99899 and ABI0010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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0.5%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 5.3e+02;
Matches 11; Conservative 1; Mismatches 1; Indels
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0.5%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 5.3e+02;
Matches 11; Conservative 0; Mismatches 0; Indels
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ABF27286 standard; DNA; 13
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ABF95513

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and merabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99899, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF9073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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0.5%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 5.3e+02;
Matches 11; Conservative 0; Mismatches 0; Indels
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                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                        Oligonucleotide SEQ ID NO 195510 for detecting SNP TSC0048102.
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                                                                                                                                                                                                                                      Homo sapiens.
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RESULT 1299

ABH25888,

Matches

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010
                                                                                                                                                                                                                                                                                                                        This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF9989, ABF00010-ABF9989 and ASI00010-ABF3073 captement the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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oligonucleotides, useful for diagnosis and cell typing, is to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 177161; 29pp + Sequence Listing; German.
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Best Local Similarity 84.6'
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pot_sequences
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0.5%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 5.3e+02;
Matches 11; Conservative 1; Mismatches 1; Indels
                                                                                                                                                  Length 13;
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                                                                                                             Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
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100.0%; Pred. No. 5.3e+02;
tive 0; Mismatches 0;
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SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                   Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                         Oligonucleotide SEQ ID NO 62388 for detecting SNP TSC0016541.
                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 62388; 29pp + Sequence Listing; German.
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                                                              BP.
                                                                                                                                                                                                                                                   06-APR-2001; 2001WO-IB000713
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                                                            ABC62371 standard; DNA; 13
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RCTTTACTCCATT 13
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                                                                                                                                                                                                                                                                                            (EPIG-) EPIGENOMICS AG
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                                                                                 ABC62371;
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytcosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99999 and ABI00010-ABI22073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at was obtained in electronic format from Wi ftp.wipo.int/pub/published_pct_sequences

. 0 0.5%; Score 11; DB 1; Length 13; 44.6%; Pred. No. 5.3e+02; ve 1; Mismatches 1; Indels Sequence 13 BP; 8 A; 3 C; 0 G; 1 T; 0 U; 1 Other; 84.6%; 11; Conservative Similarity Query Match Best Local 9 Best Loca Matches

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Gaps

1008 GACACCTGAAAA 1020

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Oligonucleotide SEQ ID NO 195509 for detecting SNP TSC0048102 RESULT 1304
ABF95512/c
ID ABF95512 standard; DNA; 13 BP.
XX
AC ABF95512;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonuclectide SEQ ID NO 195509

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens,

WO200177384-A2

18-OCT-2001.

07-APR-2000; 2000DE-01019173.

06-APR-2001; 2001WO-IB000713.

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

claim 1; SEQ ID NO 195509; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABC00100-ABF99899, ABH0010-ABF99899 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Sequence 13 BP; 3 A; 0 C; 7 G; 2 T; 0 U; 1 Other;

Gaps ; 0 Match 0.5%; Score 11; DB 1; Length 13; Local Similarity 84.6%; Pred. No. 5.3e+02; les 11; Conservative 1; Mismatches 1; Indels Query Match Best Loca Matches

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1088 GCTTCACCCCCAC 1100 RCTTCACCCCTAC 1 13 ò 쉽

ABF53322 standard; DNA; 13 BP. ABF53322; RESULT 1305 ABF53322

Oligonucleotide SEQ ID NO 153319 for detecting SNP TSC0038760. (first entry) 21-FEB-2002

SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

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Gaps

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic formmat from WIPD at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                Sequence 13 BP; 2 A; 6 C; 0 G; 4 T; 0 U; 1 Other;
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                      Berlin K;
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07-APR-2000; 2000DE-01019173.
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Best Local Similarity 100.0
Matches 11, Conservative
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                                         (EPIG-) EFIGENOMICS AG
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Oligonucleotide SEQ ID NO 93457 for detecting SNP TSC0023347.

(first entry)

21-FEB-2002

ABC93440;

ABC93440 standard; DNA; 13

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ABC93440
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 targersent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                    Query Match 0.5%; Score 11; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 5.3e+02; Matches 11; Conservative 0; Mismatches 0; Indels
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              Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;
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methylation status.
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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Berlin K;

Piepenbrock C,

olek A,

WPI; 2001-657177/75

(EPIG-) EPIGENOMICS AG.

06-APR-2001; 2001WO-IB000713 07-APR-2000; 2000DE-01019173

WO200177384-A2.

18-OCT-2001.

Homo sapiens.

Claim 1; SEQ ID NO 93457; 29pp + Sequence Listing; German.

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but fur wipo int/pub/published_pct_sequences
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84.6%; Pred. No. 5.3e+02;
tive 1; Mismatches 1; Indels
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Best Local Similarity
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Gaps

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851 TTGAGAATGTT 861

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TTGAGAATGTT 13

RESULT 1309

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18-OCT-2001

olek A,

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                     This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire wipo int/pub/published_pct_sequences
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                                                           Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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ABC58758 standard; DNA; 13 BP.
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Matches 11, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes novel oligonucleotide primars or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, contral nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but they wipo int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 73261; 29pp + Sequence Listing; German.
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nes 11; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, azdiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers ealso used for detecting cell type differentiation. ABC0010-ABC09989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989, DAFF99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire printed specification, but ftp.wipo.int/pub/published_pct_sequences
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Query Match Best Local Similarity

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                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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ABF17946 standard; DNA; 13 BP.
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1147 ACCTATACCCC 1157
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ABF17946/c
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABE99899, ABH00010-ABH99889 and ABI00010-ABI82073 data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                               Oligonucleotide SEQ ID NO 117943 for detecting SNP TSC0029481
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84.6%; Pred. No. 5.3e+02;
/ative 1; Mismatches 1; Indels
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21-FEB-2002 (first entry)
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Best Local Similarity 84.67
Matches 11, Conservative
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ABF18296
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosia methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and merabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE09989, ABF00010-ABE99989, ABF00010-ABE99989, ABF00010-ABE99989, and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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100.0%; Pred. No. 5.3e+02;
tive 0; Mismatches 0; Indels
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Matches 11; Conservative
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABF00010-ABF9989 and ABI00010-ABI82073 fara for this patent did not form par of the printed specification, but the was obtained in electronic format from WIPO at Claim 1; SEQ ID NO 118294; 29pp + Sequence Listing; German.

Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

0; Gaps Ouery Match 0.5%; Score 11; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 5.3e+02; Matches 11; Conservative 0; Mismatches 0; Indels 851 TTGAGAATGTT 861 à

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13 TTGAGAATGTT 3 g

ABF36010 standard; DNA; 13 BP. ABF36010; RESULT 1318 ABF36010

(first entry) 21-FEB-2002

Oligonucleotide SEQ ID NO 136007 for detecting SNP TSC0033966.

SNP, single nucleotide polymorphism, human; diagnosis, PNA, cancer, CNS, peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 136007; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABF09989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention, NOTE: The sequence

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                                                                                                                                                                                                                                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
data for this patent did not form part of the printed specification, was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                           Query Match 0.5%; Score 11; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 5.3e+02; Matches 11; Conservative 0; Mismatches 0; Indels
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ABF77165 standard; DNA; 13 BP.
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RESULT 1320 ABH29778/c

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABF99899, ABH00010-ABF99899 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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peptide nucleic acid, cytosine methylation; cardiovascular, primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
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0.5%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 5.3e+02;
Matches 11; Conservative 1; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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07-APR-2000; 2000DE-01019173.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

Oligonucleotide SEQ ID NO 205755 for detecting SNP TSC0050430.

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                                                       Olek A, Piepenbrock C,
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This invention describes novel oligonucleotide primers or peptide nucleic

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acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory. Central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABC0010-ABH99989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH0010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; paptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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100.0%; Pred. No. 5.3e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                 Sequence 13 BP; 2 A; 10 C; 0 G; 1 T; 0 U; 0 Other;
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Best Local Similarity
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                   Oligonucleotide SEQ ID NO 62670 for detecting SNP TSC0016602.
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                                                    21-FEB-2002 (first entry)
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                  ABC62653;
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Local Similarity 100.0%; Pred. No. 5.3e+02;
Les 11; Conservative 0; Mismatches 0;
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rative 0; Mismatches 0;
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                      Query Match
Best Local Similarity 100.
Matches 11; Conservative
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ABC61675
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Berlin K;

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100.0%; Pred. No. 5.3e+02;
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Olek A,

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Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                             methylation status.
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RESULT 13 ABH25889

à g Berlin K;

Piepenbrock C,

Olek A,

WPI; 2001-657177/75.

(EPIG-) EPIGENOMICS AG.

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The
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                                        This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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Claim 1; SEQ ID NO 225866; 29pp + Sequence Listing; German
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RESULT 1330

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at
                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                               Oligonucleotide SEQ ID NO 212089 for detecting SNP TSC0051687.
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oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF0010-ABF99889, ABF0010-ABF99889, ABF0010-ABF99889, ABF0010-ABF99889, ABF0010-ABF99889 and ABI0010-ABF82073 represent the oligomers described in invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire wipo.int/pub/published_pct_sequences
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in Chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Oligonuclectide SEQ ID NO 190458 for detecting SNP TSC0000398.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and Oytosine methylation status in chemically pretreated genomic DNA. The obligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cartial nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                       This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 tepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                      'Match 0.5%; Score 11; DB 1; Length 13; Local Similarity 100.0%; Pred. No. 5.3e+02; les 11; Conservative 0; Mismatches 0; Indels
  Claim 1; SEQ ID NO 72609; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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          0.5%; Score 11; DB 1; Length 13;
100.0%; Pred. No. 5.3e+02;
ive 0; Mismatches 0; Indels
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Query Match
Best Local Similarity 100."
Matches 11; Conservative
                                                                                                                                                991 ATTGTTTGTGG 1001
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                 Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                     Oligonucleotide SEQ ID NO 102652 for detecting SNP TSC0025640.
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0.5%; Score 11; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 5.3e+02;

Matches 11; Conservative 1; Mismatches 1; Indels
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RESULT 1337
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ABC90468,

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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The cientral nervous system, cardiovascular and metabolic disorders. The ABC99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

oligonucleotides are used for diagnosis and/or prognosis of cancer and

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designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                              Claim 1; SEQ ID NO 67014; 29pp + Sequence Listing; German.
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Piepenbrock
       WPI; 2001-657177/75
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olek A,
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                               This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE99989, ABF00010-ABE99989, ABH00010-ABE99989 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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designed to detect single-nucleotide polymorphisms and cytosine
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9999, ABH00010-ABH99989 and ABI00010-ABI82073 tapeses the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                   Oligonucleotide SEQ ID NO 74729 for detecting SNP TSC0019197.
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                                 21-FEB-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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      Pred. No. 5.3e+02;
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI32073 data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 62669; 29pp + Sequence Listing; German.
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debigned to detect single-nuclectide polymorphisms and cytosine methylation status. German. SEQ ID NO 150805; 29pp + Sequence Listing;

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF99899, ABF00010-ABF99899, ABF00010-ABF99899, ABF00010-ABF99899 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 0 A; 0 C; 10 G; 3 T; 0 U; 0 Other;

Gaps ; 0 Length 13; 0; Indels 0.5%; Score 11; DB 1; Le 100.0%; Pred. No. 5.3e+02; iive 0; Mismatches 0; Local Similarity 100. Query Match Matches

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1092 CACCCCCACC 1102 11 cácccccaccc 1 ઠે g

ABH47706 standard; DNA; 13 BP. ABH47706; RESULT 1346 ABH47706

Oligonucleotide SEQ ID NO 247683 for detecting SNP TSC0060535. (first entry) 22-FEB-2002

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Gaps

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2. 18-OCT-2001. 06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 247683; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC99989, ABF00010-ABF99989 and ABI00010-ABI82073

BP.

12 ACTACTACTAA

(first entry)

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schultz451-1.rng

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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                         Oligonucleotide SEQ ID NO 100868 for detecting SNP TSC0025093.
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                                                                                                                                   ABF00871 standard; DNA; 13
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                                                                                RESULT 1348
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Abroos71

Abroos72

Abroos
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represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fit, wipo.int/pub/published_pot_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide SEQ ID NO 100867 for detecting SNP TSC0025093.
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                                                                                                                                                                            0.5%; Score 11; DB 1; Length 13;
100.0%; Pred. No. 5.3e+02;
tive 0; Mismatches 0; Indels
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                                                                                                                             Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
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Best Local Similarity 100.
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methylation status.
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Berlin K;

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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99999 and ABI00010-ABI82073 tepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in clearing NPO at
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100.0%; Pred. No. 5.38+02;
Live 0; Mismatches 0; Indels
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1039 ACTACTACTAA 1049

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Piepenbrock C,
                  (EPIG-) EPIGENOMICS AG.
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ABC82812/c
ID ABC82813
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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0.5%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 5.3e+02;
Matches 11; Conservative 1; Mismatches 1; Indels
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting call type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABF00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequence
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                                 set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 52805; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match

0.5%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 5.3e+02;
Matches 11; Conservative 1; Mismatches 1; Indels
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ABC82812 standard; DNA; 13
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WPI; 2001-657177/75
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Sequence 13 BP; 2 A; 10 C; 0 G; 1 T; 0 U; 0 Other;

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, coingomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                               Sequence 13 BP; 5 A; 0 C; 3 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                   SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Query Match
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RESULT 1354 ABC93441/c

Set of oligonuclectides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Berlin K;

Olek A, Piepenbrock C,

WPI; 2001-657177/75.

(EPIG-) EPIGENOMICS AG

06-APR-2001; 2001WO-IB000713.

WO200177384-A2

18-OCT-2001

07-APR-2000; 2000DE-01019173

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and oycosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                 SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                               This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligoners for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligoners are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABI82073 represent the oligoners described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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designed to detect single-nucleotide polymorphisms and cytosine
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central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF0010-ABF99989 and ABI00110-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at Ity.who.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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tive 1; Mismatches 1; Indels
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994 GITTGTGGGAAAT 1006
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                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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         Oligonucleotide SEQ ID NO 219205 for detecting SNP TSC0053297.
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claim 1; SEQ ID NO 160961; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; 8s; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABF99989, ABH0010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABF99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABF99889, ABH00010-ABH99889 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                             SNP, single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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100.0%; Pred. No. 5.3e+02;
iive 0; Mismatches 0; Indels
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was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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WO200177384-A2. Homo sapiens

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, azdiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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ive 0; Mismatches 0; Indels
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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designed to detect single-nucleotide polymorphisms and cytosine
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and cytosine methylation status in chemically pretreated genomic DNA. The objognosis are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 -ABC99899, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF9989, but in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
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84.6%; Pred. No. 5.38+02;
tive 1; Mismatches 1; Indels
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   Score 11; DB 1; Pred. No. 5.3e+02;
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                 Similarity 84.6
11; Conservative
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(EPIG-) · EPIGENOMICS AG

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a central nervous system, acadiovascular and metabolic discoders. The oligomers are also used for acadiovascular and metabolic discoders. The oligomers are also used for acadiovascular and metabolic discoders. The represent the oligomers described in the invention. ABC0010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                       Oligonucleotide SEQ ID NO 82830 for detecting SNP TSC0020881,
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0.5%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 5.3e+02;
Matches 11; Conservative 0; Mismatches 0; Indels
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
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100.0%; Pred. No. 5.3e+02;
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Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIFO at ftp.wipo.int/pub/published_pct_sequences
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ABC99913 standard; DNA; 13 BP.
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tive 0; Mismatches 0; Indels
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CCACCCTATCA 11
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABC00010-ABH99889 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form mat of the printed specification, but was obtained in electronic format from WIPO at the printed specification, but ftp.wipo.int/pub/published_pct_sequences
             This invention describes novel oligonucleotide primers or peptide nucleic acid (FNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                              Piepenbrock C,
                                               (EPIG-) EPIGENOMICS AG
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                      SNP; single nuclectide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                 Oligonucleotide SEQ ID NO 136008 for detecting SNP TSC0033966.
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ABF36011/c
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100.0%; Pred. No. 5.3e+02;
tive 0; Mismatches 0; Indels
                                                         Query Match 0.5%; Score 11; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 5.3e+02; Matches 11; Conservative 0; Mismatches 0; Indels
                    Sequence 13 BP; 3 A; 10 C; 0 G; 0 T; 0 U; 0 Other;
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Olek A,

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100.0%; Pred. No. 5.3e+02;
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RESULT 1382

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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically prerreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and merabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WPPO at
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                                                        Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                      Claim 1; SEQ ID NO 178020; 29pp + Sequence Listing; German.
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34.6%; Pred. No. 5.3e+02;
ive 1; Mismatches 1;
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ABF53323 standard; DNA; 13 BP.
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100.0%; Pred. No. 5.3e+02;
rative 0; Mismatches 0; Indels
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ID ABF78023 standard; DNA; 13 BP.
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range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers a also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99889, ABF00010-ABF99899 and ABI00010-ABF99893 are present the oligomers described in the invention. NOTE: The sequence data for this patent did not form par of the printed specification, but was obtained in electronic format from WIPO at fire printed specification, but fire wipo int/pub/published_pct_sequences
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Matches 11, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide nucleic acid, cytosine methylation, cardiovascular, primer; ss;
central nervous system, gastrointestinal, respiratory, immune, metabolic.
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This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABC0010-ABE99899, ABC0010-ABE99989, ABC0010-ABE99989, and ABI0010-ABE99989 and ABI0010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence was obtained in electronic format from WIPO at the printed specification, but the wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                       Set of Oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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2001US-0296876P.
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24-OCT-2001;
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                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                      Oligonucleotide SEQ ID NO 186798 for detecting SNP TSC0046048.
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(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13 GAGAATGTTAA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                WO200177384-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-FEB-2002
                                                                                                                                                                                                                                                                                             Homo sapiens
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ABH16023;

RESULT 1389 ABH16023

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Gaps

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(DRAP/) (ROBE/)

Draper

Blatt

(PAVC/) (LEEP/) MORR/)

(RIBO-) (BLAT/) (MACE/) (MCSW/)

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The Ikaros gene encodes a zinc finger protein which can be used in a therapeutic composition to treat animals with an immune system disorder. It may also be used for assessing whether a subject is at risk for an immune disorder. It is of particular use in treating a disorder of the corpus striatum. Heterologous genes may be expressed by placing them to under the control of an ikaros responsive control element and contacting the element with an ikaros protein. Potential high affinity binding sites for the Irak-alpha, beta and delta, the CD3-delta, -peptlon and -gamma of the TCR-alpha, -beta and -delta, the CD3-delta, -peptlon and -gamma of other T cell restricted antigens. Related sequences to the Ikaros of other T cell restricted antigens. Related sequences to the Ikaros motif were also found in the purine boxes of the IL2 gene in the in the INY long terminal repeat. See also AAG61504-Q61543. (Updated on 10-MAR-INY long terminal repeat. See also AAG61504-Q61543. (Updated on 10-MAR-INT) to add missing OS field.) (Updated on 25-MAR-2003 to correct PN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    lkaros; mIK; transcription factor; mouse; lymphocyte;
cell differentiation; T cell; cancer; immunodeficiency;
Alzheimer's disease; therapy; diagnosis; T cell receptor; enhancer; ss.
                                                                                                                                                                                                              I-cell pathway regulatory gene, Ikaros - encodes family of unique zinc
finger proteins, useful for treating immune system disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mouse T cell receptor alpha enhancer binding site for Ikaros.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.5%; Score 11; DB 1; Length 14;
100.0%; Pred. No. 6.6e+02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 14 BP; 3 A; 1 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                  Disclosure, Page 27, 112pp, English.
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14-SEP-1993; 93WO-US008743.
                                       92US-00946233
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                                                                                 (GEHO ) GEN HOSPITAL CORP.
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                                                                                                                                                                      WPI; 1994-118387/14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Georgopoulos K;
                                                                                                                              Georgopoulos K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-SEP-1996;
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                                       14-SEP-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             field.)
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The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes, DNAzymes, or nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV practically bind the Enhancer I region of HBV genes and MBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepstcoellular carcinoma. The present sequence represents a target for one of the anti-
                                                                                                                                                                                                                                                                                                                                       Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus infection.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ikaros; zinc finger; protein; immune disorder; therapy; treatment;
corpus striatum; regulatory gene; enhancer; regulatory element;
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                                                                                                                                                                                                                                            Lee
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                                                                                                                                                                                                                                          Pavco
                                                                                                                                                                                                                                          Mcswiggen J, Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 13 BP; 4 A; 5 C; 2 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 11; DB 1; I
Pred. No. 5.3e+02;
2; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 321; 387pp; English.
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Local Similarity 81.8%;
les 9; Conservative 2
                       RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (revised)
(first entry)
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Roberts E;
                                              BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                           WPI; 2003-229207/22.
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                                                                                                                            PAVCO P.
LEE P.
DRAPER K.
ROBERTS E.
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WPI; 1998-378292/33

31-MAR-1994

Mus sp

25-MAR-2003 10-MAR-2003 21-OCT-1994

AAQ61505;

RESULT 1391

Query Match

Matches

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Gaps . 0

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This oligonucleotide from the T cell receptor alpha enhancer was identified as a potential high affinity binding site for Ikaros proteins (see AMY70851-71). It partially includes the core motif GGGAA found in consensus recognition sequences for murine Ikaros isoforms mIk-1, mIk-2 and mIk-3 (see AAV52830-32). High affinity binding sites for Ikaros have the TCR antigen complex, the CD3 genes, the SL3 and HIV long terminal repeat and in chancer and promoter regions of the regulatory domains of the TCR antigens complex, the CD3 genes, the SL3 and HIV long terminal repeat and in the regulatory domains of other T cell restricted antigens (see AAV45258-402) by gel retardation assay. Ikaros is involved in early differentiation of lymphocytes. The invention provides Ikaros nucleic acids (see AAV4205-11 and AAV4484) and polypeptides, vectors and host cells. These are used to treat T and B cell diseases, to control calls. These are used to treat T and B cell diseases, to control responsive element, to treat nervous system diseases and to modulate cell division, amplification or differentiation, especially in haematopoietic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ikaros poly:peptide(s) - useful for treating disorders of immune system or corpus striatum.
New nucleic acid encoding Ikaros protein involved in early differentiation of lymphocytes - existing in several isoforms, and related products, used to treat e.g. immune diseases or cancer and to control cell differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CD3-delta gene; Ikaros gene; T cell; progenitor stem cell; leukaemia; differentiation marker; immune system; corpus striatum; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.5%; Score 11; DB 1; Length 14; 00.0%; Pred. No. 6.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 14 BP; 3 A; 1 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Pred. No.
                                                                                         Disclosure; Page 37; 158pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV67069 standard; cDNA; 14 BP.
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93US-00121438.
94US-00238212.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alzheimer's disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGTGGGAGG 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-582621/49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seorgopoulos K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-SEP-1992;
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02-MAY-1994;
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Synthetic.
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The present invention describes a purified peptide having at least one of the following properties: (a) it stimulates transcription of a DNA CC the following properties: (a) it stimulates transcription of a DNA consensus sequence under the control of a delta A element or an inverse binding oligonucleotide consensus sequence; (b) it binds to any of a delta A element; an NFKB element or an inverse binding oligonucleotide consensus sequence; (c) it competitively inhibits the binding of a naturally occurring inverse binding oligonucleotide consensus sequence; (d) it competitively inhibits protein interactions of transcriptional complexes (c) it inhibits protein-protein interactions of transcriptional complexes formed with naturally occurring interactions of transcriptional complexes (c) it inhibits protein-protein interactions of independent of delta A elements. NFKB elements and/or independent oligonucleotides, competitively inhibit binding of naturally occurring interos binding oligonucleotides, competitively inhibit interactions of transcriptional complexes with continuity protein-protein interactions of transcriptional complexes with continuity protein-protein interactions of transcriptional complexes with continuity protein-protein interactions of transcriptional complexes with disorders, e.g. leukaemia or AlDS, or corpus striatum disorders, e.g. alzheimer's disease. AAV66975 to AAV67118 represent oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "Forms double stranded region with bases 14-11 of sequence appearing as AAS12680"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "Forms double stranded region with bases 6-1 of sequence appearing as AAS12680"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hairpin ribozyme; RNA catalysis; Human immunodeficiency virus; anti-viral; substrate RNA; ss; Tobacco ringspot virus; mutant.
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100.0%; Pred. No. 6.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tobacco ringspot virus RNA Substrate molecule mutant #9.
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 14 BP; 3 A; 1 C; 8 G; 2 T; 0 U; 0 Other;
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/label= Cleavage_point
replace(8,C)
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/*tag= a
/bound_moi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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misc_binding
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Best Local S:
Matches 11,
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sequences obtained from both wild-type tubercle bacilli (WITB) that are susceptible to a drug and mutant-type tubercle bacilli (WITB) that are susceptible to a drug and mutant-type tubercle bacilli (WITB) that are resistant to a drug. The drugs used in the present invention are rifampicin (RFP), streptomycin (SM), kanamycin (KM), isoniazid (INH) and chambucol (BB). The prob gene is responsible for resistance to RFP; the rrs gene is responsible for resistance to SM, the inhA gene is responsible for resistance to INH; the katG gene is responsible for resistance to INH; call the embB gene is responsible for resistance to INH; call the embB gene is responsible for resistance to INH; call the embB gene is responsible for resistance and the embB gene is responsible for resistance and convention also relates to nucleic acid probes having part of a nucleic sequence of tubercle bacilli (TB) responsible for drug resistance and primers used to generate the probes. The present sequence is an oligonucleotide of the present invention can be used to enable the differentiation of drug resistance and the determination of infection with tubercle bacilli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hepatitis C virus, HCV; internal ribosome entry site element; IRES; ss; 40S ribosome subunit; domain IIId; domain IIIe.
                                                                                        present invention relates to oligonucleotides based on nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "Major groove exposed Watson-Crick face"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag≈ d
/note= "Major groove exposed Watson-Crick face"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               *tag= e
note= "Major groove exposed Watson-Crick face"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 11; DB 1; Length 14; 100.0%; Pred. No. 6.6e+02; Artive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hepatitis C virus IRES element domain IIIe RNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 14 BP; 1 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          *tag= c
note= "Form sheared base pair"
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*tag= b
note= "Form wobble pair"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                            Example 1; Page 70; 114pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               310/c
ABK15310 standard; RNA; 14 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-JUL-2001; 2001WO-US021871
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Best Local Similarity 100.
Matches 11; Conservative
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*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14 CAGCGCCCACA 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hepatitis C virus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              simultaneously
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bacilli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABK15310,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a synthetic RNA catalyst capable of cleaving an RNA substrate, the catalyst comprising a substrate binding portion and a "hairpin" portion, i.e. a hairpin ribozyme. The RNA catalyst is used for cleaving RNA substrates, e.g. RNA from Human Immunodeficiency virus (i.e. an anti-viral substrates) e.g. RNA from Human immunodeficiency virus (i.e. prokaryotes and eukaryotes. The present sequence is mutated substrate RNA of a hairpin ribozyme sequence of the invention, from Tobacco ringspot virus. Note: The present sequence does not appear in the specification but is derived from the substrate RNA molecule shown in Pigure 42C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New oligonucleotides, nucleic acid probes and primers are useful for differentiating drug-resistance and determining infection with tubercle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tubercle bacillus, drug sensitivity, drug resistance, rifampicin, streptomycin, kanamycin, isoniazid, ethambutol, rpoB gene, rrs gene, rpsL gene, inhA gene, katG gene, embB gene, probe, PCR primer, ss.
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                                                                                                                                                                                                                                                                                                                                                                        Hairpin ribozymes capable of cleaving an RNA substrate.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 14 BP; 2 A; 2 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                 (UYDE-) UNIV DEKALB NORTHERN ILLINOIS.
(BIOT-) BIOTECHNOLOGY RES & DEV CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Takenishi S;
                                                                                                                                                                                                                                                                                                                                                                                                                          Example 32; Page; 116pp; English
                                                                                                                                                                                                                                                                          Hampel AE, Tritz RH, Hicks MF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF95191 standard; DNA; 14 BP
                                                                         89US-00409666.
90US-00577658.
91US-00703427.
93US-00078774.
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     95US-00476423
                                                    88US-00247100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligonucleotide: SEQ ID 185.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-246696/26.
                                                                                                                                                                                                                                                                                                                            WPI; 2001-556486/62.
                                            20-SEP-1988;
20-SEP-1989;
04-SEP-1990;
14-MAY-1991;
17-JUN-1993;
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     07-JUN-1995;
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Cowsert LM;

Crooke ST, Mirabelli CK, Ecker DJ,

WPI; 1993-336826/42.

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The present invention relates to a new computer for producing three dimensional representation of a molecule. The computer of the invention comprises a machine-readable data storage medium, a working memory for storing instructions, a central processing unit coupled to the working memory and machine-readable data storage medium and a display coupled to the central processing unit. The molecule comprises a hepatitis C virus (HCV) internal ribosomal entry site (IRES) element. The invention is useful for producing a three dimensional representation of a molecule comprising hepatitis Virus C IRES element, for identifying potential inhibitors of hepatitis Virus C IRES element, for identifying potential interactions of hepatitis Virus C IRES element, for identifying potential comprising hepatitis Virus translation and for modelling interactions of the IRES with its binding partner, the 40S tibosome subunit. The computer generates the three-dimensional representation of the HCV IRES stem loops in at least one of domain IIId or IIIe. The structural data permits the identification of atoms that are important for ADS subcompal subunit binding. The present mucleic acid sequence represents the hepatitis C virus internal ribosome entry site element domain IIIe of the invention. This sequence represents residues 290-303
                                                                                                                                                         Computer for producing a three dimensional representation of a molecule hepatitis C virus entry site element comprises a machine-readable device, data storage medium, working memory, central processing unit and display.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Papillomavirus; transactivator messenger; mENA function; inhibitor; infection; warts; feet; laryrx; condylomata acuminata; epidermodysplasia verruoiformis; flat cervical warts; cervical intraepithelial neoplasia; cancer; HPV; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Match 0.5%; Score 11; DB 1; Length 14; Local Similarity 100.0%; Pred. No. 6.6e+02; es 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 14 BP; 2 A; 3 C; 6 G; 0 T; 3 U; 0 Other;
                                          (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BPV-1 E2 gene (5' coding region).
                                                                                                                                                                                                                                           Claim 2; Fig 1c; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ50075 standard; DNA; 15 BP.
10-JUL-2000; 2000US-0217673P.
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(first entry)
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                                                                                                                       WPI; 2002-179655/23.
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27-APR-1994
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                                                                               Puglisi JD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
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AAQ50075/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                                                                                                                                                                 The sequence (AAQ50059) shows the BPV-1 E2 transactivator gene, BPS 2443-4203, while sequence (AAQ50061) is the nucleotide sequence of the 5' common untranslated region of BPV-1 coding for early messenger RNAs showing the domain having nucleotides 89-304 See also (AAQ50062-97) for related nucleotides and their respective regions. The oligonucleotides are useful for treating papilloma virus infections, such as warts of the hands, feet and larynx, condylomate acuminata, epidermodysplasia veruciformis, flat cervical warts and cervical intrapithelial neoplasia. They may also be used to regulate the growth of cancer cells which carry HPV. (Updated on 25-WAR-2003 to correct PN field.)
                                                                                                                               Papilloma virus anti sense oligo nucleotide inhibition - useful to treat warts, condylomata acuminata and to regulate growth of cancer cells carrying human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus; antiviral; diagnostic; 88.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 3 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                    Disclosure, Fig 6; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT01717 standard; DNA; 15 BP.
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/*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9504748-A1.
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92US-00860925.

31-MAR-1992;

(ISIS-) ISIS PHARM INC

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                                  New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5 untranslated region, intron/exon (I/E) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IEI and IEE, or pytomegalovirus gene selected from DNA polymerase, IEI and IEE, or pytomegalovirus The PNAs can be used to target RNA and single stranded DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which a lirst PNA strand binds with RNA or ssDNA and a second PNA strand binds with RNA or ssDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand binds with the area water soluble, which facilitates possess no significant charge and are water soluble, which facilitates cellular uptake. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by proteases. The present sequence targets papillomavirus 5'-coding region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr.abl; oncogene; translocation; chromic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atheroselerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoind arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human IL-5 hammerhead ribozyme target sequence (nt. position 698).
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                                                                                                                                                                                                                                                                                          Sequence 15 BP; 3 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
             Claim 10; Page 52; 65pp; English.
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94US-00218934.
94US-00224483.
94US-00224958.
94US-00228041.
94US-0021280.
94US-00211280.
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24-MAR-1997 (first en
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04-APR-1994)
07-APR-1994)
15-APR-1994)
15-APR-1994)
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06-JUL-1994;
15-AUG-1994;
16-AUG-1994;
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AAT54284/c
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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophilia (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Stinch S, Karpelsky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; Tqacz D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Papillomavirus; bovine; BPV; BPV-1; E2 transactivator; detection; inhibitor; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 5 A; 3 C; 0 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; Page 215; 407pp; English.
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AATO0468/c
ID AATO0468 standard; DNA; 15 BP.
94US-00293520
94US-00300000
94US-00311486-
94US-00311449-
94US-00311449-
94US-0031671-
94US-0031671-
94US-00321993-
94US-003487-
94US-00345516-
94US-00345516-
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94US-00345518-
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(first entry)
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   19-AUG-1994,
02-SEP-1994,
23-SEP-1994,
23-SEP-1994,
23-SEP-1994,
03-OCT-1994,
07-OCT-1994,
07-OCT-1994,
04-NOV-1994,
                                                                                                                                                                                                                                                                                                                                                          16-DEC-1994;
23-DEC-1994;
30-JAN-1995;
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28-NOV-1994;
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23-MAY-1996
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Page 646
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Ramharack R;

Newton RS,

Mcswiggen J,

Stinchcomb DT,

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                                                                                                                                                                                                                                                                                                                     AAT00455-T00474 represent oligonucleotides targetted at the E2 mRNA of bovine papillomavirus 1 (BPV-1). This sequence is targetted against a portion of the 5' coding region. These sequences were used to design antisense phosphorothiote oligonucleotides against HPV-11 E2 mRNA, such by F151 2105 (see AAT00450). The HPV-11 E2 antisense oligonucleotides and thereby inhibit E2-dependent transactivation. The HPV-11 E2 mRNA (preferably the AUG region) and thereby inhibit E2-dependent transactivation. The HPV-11 oligonucleotide sequences (and analogues of them) can interfere with, or modulate the function of mRNA. The sequences can be used for the diagnosis and treatment of HPV infections. They can also be used for the detection and quantification of HPV in samples. (Updated on 25-MRR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                           New oligo:nucleotide(s) corresponding to papilloma:virus sequences - for the diagnosis and treatment of infections and for detection and quantification.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 3 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                           Crooke ST;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity 100.0%; Score 11; c. Similarity 100.0%; Pred. No. 8.10
                                                                                                                                                                          Ecker DJ,
                                                                                                                                                                                                                                                                                              Disclosure; Col 11-12; 39pp; English.
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                                                                                                    89US-00445196.
92US-00984263.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1159 GGTGACTGTCC 1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11; Conservative
                                                                                                                                             (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                         WPI; 1995-365244/47.
                                                                      31-MAR-1992;
                                                                                                    04-DEC-1989;
                                                                                                                 01-DEC-1992;
                                                                                                                                                                           Cowsert LM,
              US5457189-A
                                            10-OCT-1995
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Best Local (
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                                                                                                                                                                         A claimed enzymatic RNA mol. for the cleavage of apolipoprotein (a) (apo(a)) mRNA, specifically a hammerhead ribozyme, has binding arms complementary to the present acquence (nucleotide position 10532). The ribozyme blocks to some extent apo(a) expression, and can therefore be used to diagnose or treat conditions related to lipoprotein (a) levels, e.g. atherosclerosis, myocardial infarction, stroke, restenosis and heart disease. PCR was used to generate a substrate for 17 RNA polymerase transcription from monkey apo(a) CDNA clones. Labelled transcripts were synthesised in vitro to form 2 templates. The oligonicleotides and labelled transcripts were annealed, RNaseH added and the mixts incubated. After a designated time the reactions were stopped, and RNA sept. on sequencing polyacrylamide gels. The percentage of substrate cleaved was determined by autoradiographic quantification, and the most
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Enzymatic RNA mols. which cleave apo(a) mRNA - useful in diagnosis and treatment of conditions related to Lp(a) levels, e.g. atherosclerosis, myocardial infarction, and heart diseases.
                                                                Enzymatic RNA mols. which cleave apo(a) mRNA - useful in diagnosis and treatment of conditions related to Lp(a) levels, e.g. atherosclerosis, myocardial infarction, and heart diseases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 3 A; 2 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                      accessible ribozyme target sites chosen
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                                                                                                                                            Claim 3; Page 21; 37pp; English.
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                                 WPI; 1996-188454/19.
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Best Local Similarity
Matches 11; Conserv
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A claimed enzymatic RNA mol. for the cleavage of apolipoprotein (a) (apo(a)) maRNA, specifically a harmerhead ribozyme, has binding arms complementary to the present sequence (nucleotide position 10543). The ribozyme blocks to some extent apo(a) expression, and can therefore be used to diagnose or treat conditions related to lipoprotein (a) levels, e.g. atherosolerosis, myocardial infarction, stroke, restenosis and heart disease. PCR was used to generate a substrate for T7 RNA polymerase transcription from monkey apo(a) DNA clones. Labelled transcripts were synthesised in vitro to form 2 templates. The oligonucleotides and labelled transcripts were annealed, RNaseH added and the mixts. Incubated After a designated time the reactions were stopped, and RNA sept. on sequencing polyacrylamide gels. The percentage of substrate cleaved was determined by autoradiographic quantification, and the most accessible ribozyme target sites chosen

Sequence 15 BP; 3 A; 2 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 0.5%; Score 11; DB 1; Length 15; Best Local Similarity 100.0%; Pred. No. 8.1e+02; Matches 11; Conservative 0; Mismatches 0; Indels 811 AAGAAAAGCCT 821 13 AAGAAAAGCCT 3 ò

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Gaps

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AAT37750 standard; mRNA; 15 BP. 18-NOV-1996 (first entry) AAT37750; RESULT 1403

Apo(a) mRNA (nt. pos. 10564) hammerhead ribozyme target sequence.

Enzymatic RNA molecule, cleavage, apolipoprotein (a); apo(a); hammerhead ribozyme; target sequence; diagnosis; treatment; lipoprotein (a); atherosclerosis; myocardial infarction; stroke; restenosis; heart disease; monkey; ss.

Cebus apella.

WO9609392-A1.

28-MAR-1996.

95WO-US011995. 21-SEP-1995; 94US-00311760. 23-SEP-1994;

(RIBO-) RIBOZYME PHARM INC.

Stinchcomb DT, Mcswiggen J, Newton RS, Ramharack R;

WPI; 1996-188454/19.

Enzymatic RNA mols. which cleave apo(a) mRNA - useful in diagnosis and treatment of conditions related to Lp(a) levels, e.g. atherosclerosis, myocardial infarction, and heart diseases.

Claim 3; Page 21; 37pp; English.

A claimed enzymatic RNA mol. for the cleavage of apolipoprotein (a) (apo(a)) mRNA, specifically a hammerhead ribozyme, has binding arms complementary to the present sequence (nucleotide position 10564). The ribozyme blocks to some extent apo(a) expression, and can therefore be used to diagnose or treat conditions related to lipoprotein (a) levels, e.g. atherosclerosis, myocardial infarction, stroke, restenosis and heart transcription from monkey apo(a) cDNA clones. Labelled transcripts were synthesised in vitro to form 2 templates. The oligonucleotides and labelled transcripts were annealed, RNaseH added and the mixts.

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incubated. After a designated time the reactions were stopped, and RNA sepd. on sequencing polyacrylamide gels. The percentage of substrate cleaved was determined by autoradiographic quantification, and the most accessible ribozyme target sites chosen
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                                                                                                             Gaps
                                                                                                                                                                                                                                                                                              Apo(a) mRNA (nt. pos. 10570) hammerhead ribozyme target sequence
                                                                                                                                                                                                                                                                                                                      Enzymatic RNA molecule, cleavage, apolipoprotein (a); apo(a); hammerhead ribozyme; target sequence; diagnosis; treatment; lipoprotein (a); atherosclerosis; myocardial infarction; stroke; restenosis; heart disease; monkey; ss.
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                                                                                   0.5%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 8.1e+02; tive 0; Mismatches 0; Indels
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                                                             Sequence 15 BP; 3 A; 2 C; 4 G; 0 T; 6 U; 0 Other;
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                                                                                                                                                                                                                      AAT37752 standard; mRNA; 15 BP.
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                                                                             Ouery Match
Best Local Similarity 100.7
Marches 11; Conservative
                                                                                                                                     811 AAGAAAAGCCT 821
                                                                                                                                                          AAGAAAAGCCT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1996-188454/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                            WQ9609392-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                   Cebus apella
                                                                                                                                                                                                                                                                                                                                                                                                                                  28-MAR-1996.
                                                                                                                                                                                                                                               AAT37752;
                                                                                                                                                             12
                                                                                                                                                                                                 RESULT 1404
                                                                                                                                                                                                             AAT37752,
  8X33333
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A claimed enzymatic RNA mol. for the cleavage of apolipoprotein (a) (apo(a)) mRNA, specifically a hammerhead ribozyme, has binding arms complementary to the present sequence (nucleotide position 10570). The ribozyme blocks to some extent apo(a) expression, and can therefore be used to diagnose or treat conditions related to lipoprotein (a) levels, e.g. atherosclerosels, myocardial infarction, stroke, restenois and heart disease. PCR was used to generate a substrate for T7 RNA polymerase transcription from monkey apo(a) cDNA clones. Labelled transcripts were labelled transcripts were annealed, RNaseH added and the mixts. Incubated. After a designated time the reactions were stopped, and RNA sept. on sequencing polyacrylamide gels. The percencage of substrate cleaved was determined by autoradiographic quantification, and the most accessible ribozyme target sites chosen

Claim 3; Page 21; 37pp; English.

Sequence 15 BP; 3 A; 3 C; 3 G; 0 T; 6 U; 0 Other;

Gabs ö Query Match 0.5%; Score 11; DB 1; Length 15; Best Local Similarity 100.0%; Pred. No. 8.1e+02; MatcHes 11; Conservative 0; Mismatches 0; Indels

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The present invention describes an oligonucleotide or oligonucleotide analogue consisting of 8-50 bases which specifically hybridises to a cap or transrepressor region of the E2 mRNA from a papillomavirus. The oligonucleotide can be used as a hybridisation probe for detecting papillomavirus in a sample or for antisense therapy of papillomavirus infections or for research. The present sequence represents a bovine papillomavirus (BPV-1) E2 antisense oligonucleotide given in the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense oligonuclectide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasconstriction; inflammation; allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                 Oligonucleotides specific for papillomavirus E2 mRNA - useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 3 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.5%; Score 11; DB 1; Le
100.0%; Pred. No. 8.1e+02;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                              Crooke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C/EBP-beta antisense oligonucleotide fragment
                                                                                                                                                                                                                                            Mirabelli CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.5%, Pre-
                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Fig 6; 33pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВР.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98WO-US019419.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97US-0059160P.
                                                                                                                                                        89US-00445196
                                                                                                                                                                         92US-00835946
                                                                                                                         96US-00692257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX55081 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1159 GGTGACTGTCC 1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                              Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 GGTGACTGTCC 1
Bovine papillomavirus.
                                                                                                                                                                                                                                                                                                                                  hybridisation probes
                                                                                                                                                                                                                                                                                WPI; 1998-530859/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prostate cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
nes 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9913886-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-1997;
                                                                                                                         05-AUG-1996;
                                                                                                                                                                           03-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUL-1999
                                                                                                                                                        04-DEC-1989;
                                                                                                                                                                                                                                                Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-1999
                                                    US5811232-A
                                                                                   22-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX55081;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV30148-66 represent antisense oligonucleotides directed against the boxine papillomavirus (BBV-1) E2 transactivator maNA. The present sequence is directed against the 5' coding region. These oligonucletides can be used for diagnosis and treatment of papillomavirus infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligo:nucleotide(s) complementary to human papilloma virus mRNA - useful as probes for diagnosing HPV infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bovine papillomavirus, BPV-1; transactivator, E2; messenger RNA, mRNA, antisense oligonucleotide, diagnosis, infection, hybridisation, probe,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                           Bovine papillomavirus antisense oligonucleotide 014(LC014.AB1)
                                                                                                                                                                                                                                                                                                 ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 11; DB 1; Length 15;
Pred. No. 8.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                            Antisense oligonucleotide; bovine papillomavirus; BPV-1; 52 transactivator mRNA; diagnosis; treatment; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bovine papillomavirus E2 antisense oligonucleotide 014.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 3 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Crooke ST;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

0.5%; Score 11; DB
Best Local Similarity 100.0%; Pred. No. 8.1
Matches 11; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mirabelli CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Col 9-10; 36pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89US-00445196.
90WO-US007067.
92US-00860925.
                                                                                                                                    AAV30161 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                        95US-00370517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV53790 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1159 GGTGACTGTCC 1169
                  811 AAGAAAAGCCT 821
                                                  Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTGACTGTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                             Bovine papillomavirus
                                                  11 AAGAAAAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1998-321521/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-JAN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-1989;
03-DEC-1990;
                                                                                                                                                                                                         11-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                   USS756282-A
                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ecker DJ,
                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                         AAV30161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1406
AAV53790/c
                                                                                                      RESULT 1405
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8 g ö

Gaps

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New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                              Disclosure; Page 543; 1343pp; English
              (UYEC-) UNIV EAST CAROLINA.
                                                                   WPI; 2000-205971/18.
                                                                                                                                       cancers,
                                         Nyce JW;
  The specification describes antisense oligonucleotides (AAX52869-X55271)
directed against at least 2 mRNAs selected from target genes, coding and
non-coding regions of RNAs corresponding to target genes, gene initiation
codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
end and the juxta-section between coding and non-coding regions and all
segments of RNAs encoding proteins associated with one or more diseases,
conditions or mixtures. The antisense oligonucleotides may be derived
from sequences AAX55180-271 can be used for the antisense treatment of
diseases and conditions. Typical diseases and conditions are those
associated with impaired respiration and inflammation, including lung
diseases, pulmonary vasconstriction, inflammation, respiratory
distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
cute asthma, allergies, asthma, impeded respiration respiratory
disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
colon cancer, breast cancer, lung cancer, menastasized
colon cancer, breast cancer, lung cancer, melanoma, hepatic metastases, as
well as all types of cancers which may metastasize
to the lungs, including breast and prostate cancer
                                                                                                         New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

0.5%; Score 11; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 8.1e+02;
Matches 12; Conservative 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 0 A; 8 C; 4 G; 2 T; 0 U; 1 Other;
                                                                                                                                                Disclosure; Page 70; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1240 CTCGCCTCCGACCCC 1254
09-JUN-1998; 98US-00093972
                         (UYEC-) UNIV EAST CAROLINA
                                                                             WPI; 1999-229400/19
                                                                                                                      vasoconstriction
                                                     Nyce JW;
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Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
autoimmune disease; ss.
                                                       Gaps
                                                                                                                                                                                                                                                                            Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 6331.
                                                         ..
0
                        Query Match 0.5%; Score 11; DB 1; Length 15; Best Local Similarity 80.0%; Pred. No. 8.1e+02; Matches 12; Conservative 1; Mismatches 2; Indels
Sequence 15 BP; 0 A; 8 C; 4 G; 2 T; 0 U; 1 Other;
                                                                                                                                                                                         ВP
                                                                                    1240 CTCGCCTCCGACCCC 1254
                                                                                                       1 CTCGCCTBGGGCCCC 15
                                                                                                                                                                                       AAZ64219 standard; RNA; 15
                                                                                                                                                                                                                                               28-MAR-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                 Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                               WO9955847-A2
                                                                                                                                                                                                                                                                                                                                                                                                                          04-NOV-1999
                                                                                                                                                                                                                     AAZ64219;
                                                                                                                                                            RESULT 1409
                                                                                                                                                                            AAZ64219
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Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; infimamation; allergy; allergic disease; bronchoconstriction; inhibitor; antinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysem; pulmonary hyperjension; chronic obstructive pulmonary disease; COPD;

cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

99WO-US017712. 98US-0095212P.

03-AUG-1999; 03-AUG-1998;

24-FEB-2000.

WO200009525-A2. Homo sapiens

Human adenosine receptor related polynucleotide SEQ ID NO:2217.

AAA34528 standard; DNA; 15 BP.

RESULT 1408 AAA34528 28-JUL-2000 (first entry)

AAA34528;

1 crescerbadacece 15

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99WO-US009027.

26-APR-1999;

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The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and hepatocellular carcinoma. The ribozymes may be used in combination with interferon to treat HCV infection, other infectious diseases, autoimmune
                                                                                                                                                                                                                                  Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.
                                                                                                                                                 Pavco PA, Macejak D;
                                                                                                                                                 Blatt L, Mcswiggen JA, Roberts E,
                                                                                                                                                                                                                                                                                               Claim 1, Page 85, 123pp, English.
98US-0083217P.
98US-0100842P.
99US-00257608.
99US-00274553.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81.8%;
                                                                                                         (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 81.8
nes 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diseases, and cancer
                                                                                                                                                                                          WPI; 2000-062023/05
                    18-SEP-1998;
25-FEB-1999;
23-MAR-1999;
  27-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
####<del>X</del>#X#X#X####
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., 0.5%; Score 11; DB 1; Length 15; 31.8%; Pred. No. 8.1e+02; 0, Indels Sequence 15 BP; 3 A; 7 C; 2 G; 0 T; 3 U; 0 Other; 2; Mismatches

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974 AGTCCAAGCTC 984 ||:||||||:| | AGUCCAAGCUC 15 ò

AAF20650 standard; DNA; 15 BP AAF20650; RESULT 1410 AAF20650

Human C/EBP polynucleotide fragment #2217.

(first entry)

14-MAR-2001

Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; bronchoconstriction; lung inflammation; aurifactant depletion; respiratory; bronchodilator; antihifammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; panh; cystic fibrosis; allergic rinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis; cancer; ss.

Homo sapiens.

WO200062736-A2

26-OCT-2000.

24-MAR-2000; 2000WO-US008020

99US-0127958P 06-APR-1999;

(UYEC-) UNIV EAST CAROLINA. (NYCE/) NYCE J W.

Nyce JW;

WPI; 2000-679539/66

Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.

Claim 14; Page 265; 1592pp; English.

The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (C) isomulated the antisense oligonucleotides and (I) can be used to down-regulate the mannosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating and cativity disorders and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines receptors, adenosine receptors, cytokines and chemokine receptors, adenosine receptors, cytokines and chemokine receptors, adenosine receptors, cytokines and chemokine receptors, adenosine receptors, bradykinin receptors, contain error and pertipheral nervous and non-nervous system continues system (CMS) and pertipheral nervous and non-nervous system continues oligonucleotides may be used in this way to trast disorders including respiratory obstruction (especially pulmonary obstruction) which are associated proteins. The condition selected from pulmonary vasoconstriction, inflammation, condition selected from pulmonary vasoconstriction, inflammation, allergies, athan, cystic fibrosis (CP), allergic thinitis (AR), pulmonary transplantation relection, pulmonary disease (COPD), and hor taken and allergia remained and antibute respiration, respiratory disease (COPD), and hor fancer and antibuted and allergic fibrosis (CP), allergic thinitis (AR), pulmonary and conditions and antibuted and allergic thinitis (AR), pulmonary infections, breaded and antibuted and antibuted and allergic fibrosis (CP), allergic remains and antibuted and allergic and antibuted and antibuted and antibuted and allergic and antibuted and antib and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of the present invention

Seguence 15 BP; 0 A; 8 C; 4 G; 2 T; 0 U; 1 Other;

Gaps 0.5%; Score 11; DB 1; Length 15; 80.0%; Pred. No. 8.1e+02; ative 1; Mismatches 2; Indels Matches 12; Conservative Best Local Similarity Query Match

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1240 CTCGCCTCCGACCCC 1254 1 CTCGCCTBGGGCCCC 15 ò

AAS00030 standard; DNA; 15 BP. AAS00030

RESULT 1411

AAS00030;

(first entry) 09-MAY-2001 Human Plexin-B1 alternative splice acceptor site.

Human, Plexin-B1, semaphorin domain; hyperplasia, neoplasia, cancer, neurodegenerative disease, autoimmune disease, lupus, multiple sclerosis, inflammatory bowel disease, diabetes type I; rheumatoid arthritis, immunogen, antibody, alternative splice acceptor site, ds.

Homo sapiens

WO200114420-A2

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The sequence represents an allele specific oligonucleotide probe for genotyping individuals using the Human gene encoding the ml muscarinic cacetylcholine receptor. FiRMI. CHMR1 is one subtype of a family of 5 genetically distinct muscarinic accetylcholine receptors, mAChE, that play important roles in higher brain function such as learning and memory. The protein is a possible drug target for treatments for Alzheimer's disease and antibodies raised against the protein are useful for diagnosing and antibodies raised against the protein are useful for diagnosing and expression of the gene or activity of the protein, e.g. Alzheimer's disease and dementia with Lewy bodies
                                                                                               New variants of the ml muscarinic acetylcholine receptor gene, useful to find treatment for Alzheimer's and dementia, have single nucleotide variations at one or more of five polymorphic sites.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New polynucleotide useful for inhibiting telomerase activity in cells,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma; breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease; fertility; inflammatory condition; tumour; cancer; veterinary; immunosuppression; telomerase inhibitor; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mod_base= OTHER
/note= "N3'-P5' phosphoramidate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 8.1e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 4 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
                  Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human telomerase polynucleotide inhibitor #13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Weinrich SL;
                  Choi JY, Denton RR, Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                        Claim 15; Page 18; 52pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAS15932 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .15
/*tag= a
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Best Local Similarity 100.
Matches 11, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     869 CTGAGGACTCA 879
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGAGGACTCA 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-656955/75.
                                                          WPI; 2001-282046/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GERO-) GERON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200174136-A2
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modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gryaznov SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAS15932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1413
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         genomic DNA encoding Plexin.BI, in the region of the alternative splicing of the extracellular domain. Plexins are large transmembrane proteins whose extracellular domain shares homology with Scatter factor receptors and contain an approximately $00 amino acid Semaphorin domain. The plexin useful in diagnosis, therapy and in the biopharmaceutical industry. In particular, the plexin polymucleotides and polypeptides are useful for particular, the plexin polymucleotides and polypeptides are useful for particular, the plexin polymucleotides and polypeptides are useful for treating compounds (e.g. plexin-specific binding agents or antibodies) for treating or diagnosing a disease or disorder involving aberrant cell growth (e.g. hyperplasia, neoplasia, cancer or neurodegenerative diseases or disorders involving aberrant immune regulation (e.g. ununosuppressive diseases or blabetes Type I), or immunosuppressive diseases such as multiple sclerosis or rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                        New plexin polynucleotides and polypeptides, useful in diagnosis, therapy and in producing compounds for treating diseases involving aberrant cell growth (e.g. cancer) or immune regulation (e.g. autoimmune diseases).
                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequence represents the alternative splice acceptor site of Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                               Tesier-Lavigne M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.5%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 8.1e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human CHMR1 allele specific oligonucleotide probe #4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, ml acetylcholine receptor, CHRM1; immunogen, Alzheimer's disease, dementia with Lewy bodies; DLB; allele specific oligonucleotide probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 2 A; 9 C; 2 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                               Goodman CS,
                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Page 30; 79pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAS02944 standard; DNA; 15 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0159269P.
                                                          25-AUG-2000; 2000WO-US023365.
                                                                                                    99US-0150576P.
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                                                                                                                                                                                                               Comoglio PM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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Best Local Similarity 100.
Matches 11, Conservative
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                                                                                                                                              (UYTO-) UNIV TORINO.
(REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CCCCCTTCAGA 11
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                                                                                                                                                                                                             Artigiani S,
Tamagnone L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
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                                                                                                    25-AUG-1999;
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             01-MAR-2001
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The invention relates to polymucleotide inhibitors (I) and methods for inhibiting telomerase activity. (I) are useful in inhibiting telomerase activity. (I) are useful in inhibiting telomerase activity and proliferation of a telomerase positive cell, and in manufacturing a medicament for inhibiting telomerase activity in a cell and in treating telomerase-mediated condition or disease, such as adenocarcinoma of breast, prostate or colon, mixed cell leukaemia, Hodgkin's disease, fertility and inflammatory conditions. (I) are also useful in treating a tumour or in manufacturing a medicament for the treatment of tumour. The polymucleotide inhibitors may also be used in diagnostic assays for detecting RNA or DNA. Inhibition of telomerase activity in cells in vivo is useful in prophylactic and therapeutic methods of treating cancer and other disorders involving inappropriate expression of telomerase, and in treating veterinary proliferative diseases. Inhibition of telomerase in haematopoietic stem cells is useful for menosuppression and for selectively down-regulating specific branches of the immune system. The present sequence represents human telomerase polymucleotide inhibitor #13, as described in the method of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New oligonucleotides capable of inhibiting the function of an mRNA from a papillomavirus when hybridized to the viral mRNA useful for diagnosing, treating or preventing papillomavirus infection e.g., warts of the hands, feet or larynx.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense therapy; dermatological; anticancer; virucide; papillomavirus;
tor treating telomerase-mediated condition or disease, such as cancers, tumors, Hodgkin's disease, or inflammatory conditions.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 100.0%; Pred. No. 8.1e+02;
11, Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 5 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    viral infection; wart; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BPV-1 E2 antisense oligonucleotide #14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ecker DJ,
                                                      Example 3; Page 32; 48pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Fig 6; 36pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      89US-00445196.
90WO-US007067.
92US-00835946.
96US-00692257.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF60696 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Crooke ST, Mirabelli CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        965 AACGGTGGAAG 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACGGTGGAAG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bovine papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-201809/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-DEC-1990;
03-MAR-1992;
05-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                           the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JS6174870-B1.
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological; cardiant; virucide, ophthalmological; keloid, shi discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procter; IGFBP-2; IGFBP3; inflammation; psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatoolsis, neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neoblasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ameliorating the effects of a disorder, e.g. psoriasis, by administering to (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
        The present sequence is an antisense oligonucleotide for a papillomavirus. When the antisense oligonucleotide hybridises to a papillomavirus mRNA, the function of the mRNA is inhibited. The oligonucleotide is useful for the diagnosis and treatment of infections in animals caused by papillomavirus, such as warts of the hands, feet or larynx, condylomata acuminata, epidermodysplasia vertuciformis, flat cervical warts, cervical intraspithelial neoplasia, or other infections introdying a papillomavirus. Note: the present sequence may have a
                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                               Score 11; DB 1; Length 15; Pred. No. 8.1e+02;
                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                          Sequence 15 BP; 3 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                               Query Match 0.5%; Score 11; DB Best Local Similarity 100.0%; Pred. No. 8.1 Matches 11; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 7; Page 58; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF48823 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IGFBP3 oligonucleotide #2243.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                phosphorothicate backbone
                                                                                                                                                                                                                                                                                                                                                   1159 GGTGACTGTCC 1169
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                                                                                                                                                                                                                                                                                                                                                                                       11 GGTGACTGTCC 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-MAR-2001
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ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                        vessels or any other hyperplasia
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Sequence 15 BP; 7 A; 5 C; 3 G; 0 T; 0 U; 0 Other;

Gaps ; Score 11; DB 1; Length 15; Pred. No. 8.1e+02; 0; Indels 0.5%; Scc. 100.0%; Pred. No. e... ... 0; Mismatches Query Match 0.5 Best Local Similarity 100. Matches 11, Conservative

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AAF45214 standard; DNA; 15 BP. 30-MAR-2001 AAF45214; 1416

(first entry)

IGFBP2 oligonucleotide #53.

Antisense therapy; antiproliferative; antinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; Keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia; kidney disease; neoblasia; condition; hyperplasia; kidney disease;

Homo sapiens.

WO200078341-A1.

28-DEC-2000

21-JUN-2000; 2000WO-AU000693

99US-0140345P. 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 6; Page 34; 201pp; English.

skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborkhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a meovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic present invention relates to a method for ameliorating the effects of

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disease, kidney disease, hyperproliferation of the inside vessels or any other hyperplasia
                                                               Length 15;
                                                                                       0; Indels
                                     Sequence 15 BP; 1 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
                                                             Score 11; DB 1; L. Pred. No. 8.1e+02;
                                                                                       0; Mismatches
                                                            0.5%; S
, 100.0%;
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                                                                           Similarity
                                                             Query Match
Best Local Simil
Matches 11; (
  8 X G G
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RESULT 1417 AAF48826

ВР AAF48826 standard; DNA; 15

AAF48826;

(first entry) 30-MAR-2001

IGFBP3 oligonucleotide #2246.

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant; virucide, ophthalmological; keloid, skin discorder, Insulin-like Growth Factor. I receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia; kidney disease; necovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

21-JUN-2000; 2000WO-AU000693.

99US-0140345P. 21-JUN-1999; Edmondson SR; Werther GA, Wraight CJ,

(MURD-) MURDOCH CHILDRENS RES INST.

WPI; 2001-041421/05

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 58; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomuclectide, (for Insulan-Ilke Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomuclectide which can be used to design the antisense oligomuclectides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the skin, a brain or skin, growth factor-mediated malignancies, other sclerotic states of disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 7 A; 5 C; 3 G; 0 T; 0 U; 0 Other;

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Length 15;
                         0; Indels
       Score 11; DB 1; Le
Pred. No. 8.1e+02;
0.5%; Scc.
100.0%; Pred. No. 8.1.
               11; Conservative
       Query Match
Best Local
                         Matches
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Gaps

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1060 CCAAACCCAAG 1070

CCAAACCCAAG 11

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RESULT 1418

ВР AAF46482 standard; DNA; 15

AAF46482;

(first entry) 30-MAR-2001

IGFBP2 oligonucleotide #1321.

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, Keloid, skin discorder, Insulin-like Growth Factor. I receptor; IGF-1; pityriasis; IGF binding procein, IGFB-2; IGFBP3; inflammation, psoriasis; pilazis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; kearcosis; neoplasia; scleroderma; wart, skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693

99US-0140345P 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 6, Page 42; 201pp; English.

The present invention relates to a method for ameliorating the effects of artisense oligonucleotide, (for Insulin-like Growth Factor [IGF] and antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]) receptor, IGF binding protein [IGFBP] - 2 or IGFBP], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45153 oligonucleotides of the present invention (see AAF4151 and AAF45153 oligonucleotides of the present invention (see AAF4151 and AAF45153 nepthysosis, pityriasis, ruba, plaris, serborrhoea, keloids, keratosis, inchthyosis, pityriasis, banign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic and season of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 3 A; 0 C; 9 G; 3 T; 0 U; 0 Other;

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Gaps
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0.5%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 8.1e+02; tive 0; Mismatches 0; Indels
  Query Match
Best Local Similarity 100.
Matches 11; Conservative
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Antisense therapy, antiproliferative; antinflammatory, antipsoriatic; o'ytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                         (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                    BP.
                                                                                                                                                             IGFBF3 oligonucleotide #1662.
                                                                                                                                                                                                                                                                                                                                                                       21-JUN-2000; 2000WO-AU000693
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                                                                                    AAF48242 standard; DNA; 15
                                                                                                                                    (first entry)
1260 CAACCCCCTTC 1270
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                      14 CAACCCCCTTC 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inflammation.
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                                                                                                                                    30-MAR-2001
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                                                                                                            AAF48242;
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Example 7; Page 55; 201pp; English

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antibodied comprises contacting the skin with an arbitrance oligomucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP], which is capable of inhibiting or reducing growth factor mediated cell proliferation, Influention and/or other disorders. The present sequence is an oligomucleotide which can be used to design the antisense oligomucleotides of the present invention (see AAF45151 and AAF45153-CPF5161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic condition of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 3 A; 6 C; 2 G; 4 T; 0 U; 0 Other;

Gaps .. 0 0.5%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 8.1e+02; Vo. 6; Mismatches 0; Indels 100.08; Query Match Best Local Similarity 100. Matches 11, Conservative

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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                      cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; kertosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis; kidney disease; neovascular condition; hyperplasis; kidney disease;
                                                                                                                                                                                                   Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
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AAF48237 standard; DNA; 15 BP.
                                                                                                                                                  IGFBP3 oligonucleotide #1657.
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                                                AAF48237;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF] receptor, IGF binding protein [IGFBP] - 2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153 - F45161). The method is useful for ameliorating the effects of psoriasis, inhyposis, pityriasis, ruba, pliaris, serborrhoea, Keloids, keratosis, inhyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                  Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis, IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis, pilatis, growth factor mediated cell proliferation, ichthyosis, serborrhoea; ruba, keratosis, neoplasia, scleroderma, wart, skin cancer; sclerotic disease, hypermeovascular condition, hyperplasis, kidney disease; neoblation of the retna; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                       IGFBP2 oligonucleotide #441.
                                                                                                 AAF45602 standard; DNA; 15
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inflammation.

Homo sapiens.

28-DEC-2000.

21-JUN-1999;

30-MAR-2001

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                                                                   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; Keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; 1GFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neoblation of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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100.0%; Pred. No. 8.1e+02;
ive 0; Mismatches 0; Indels
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                                      IGFBP2 oligonucleotide #1320.
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Best Local Similarity 100.
Matches 11; Conservative
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological; keloid, skin disorder, Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological; cardiant; virucide, ophthalmological; keloid; stin discorder, insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keateosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neobascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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100.0%; Pred. No. 8.1e+02;
lve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 6 A; 5 C; 4 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                  (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 7; Page 58; 201pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF45213 standard; DNA; 15 BP
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                                                                                                                                                                                                                                                                                                                                               21-JUN-2000; 2000WO-AU000693.
                                                                                                                                                                                                                                                                                                                                                                                          99US-0140345F.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Werther GA,
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                                                                                                                                                                                                                                                          WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inflammation.
                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                          21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wraight CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-MAR-2001
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1D AAF4
XX AAF4
XX AAF4
XX AAF4
XX IGFB
XX AAT1
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomucleotide which can be used to design the antisense oligomucleotides of the present invention (see AAF45151 and AF45153-6150mucleotides of the present invention (see AAF45151 and AF45153-6160thyosis, pityriasis, ruba, plaris, serborrhoea, keloids, keratosis, incoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, hidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                               Edmondson SR;
                                                                                                                                                                                                                                                                                                                     (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 6; Page 34; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    vessels or any other hyperplasia
                                                                                                                                                                                                                                   21-JUN-2000; 2000WO-AU000693.
                                                                                                                                                                                                                                                                              99US-0140345P.
                                                                                                                                                                                                                                                                                                                                                             Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-041421/05.
                                                                                                                                                  WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  inflammation.
                                                                                                                                                                                                                                                                            21-JUN-1999;
                                                                                                          Homo sapiens
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Gaps
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0.5%; Score 11; DB 1; Length 15;
100.0%; Pred. No. 8.1e+02;
ive 0; Mismatches 0; Indels
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                                                                                                                                                              AAF45217 standard; DNA; 15
                                11, Conservative
                                                           750 GTGCACCTGCC 760
                                                                                       grecaccrecc 15
                 Local Similarity
                                                                                        'n
   Query Match
                                                                                                                                  RESULT 1425
                  Best Loca
Matches
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Sequence 15 BP; 1 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

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Antisense therapy; antiproliferative; antinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; Keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF1: pityriasis; IGF binding proctein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; kearlosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neoblasis condition; hyperplasia; kidney disease;
IGFBP2 oligonucleotide #56.
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(first entry)

30-MAR-2001

AAF45217;

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; kaloid; skin disorder; lisulin-like Growth Factor I receptor; IGFP-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psorhasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neoplasia; sclaroderma; wart; skin cancer; sclerotic disease; hyperacovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;

WO200078341-A1

Homo sapiens

IGFBP2 oligonucleotide #54.

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an anticonse oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [FIGF]-2 or IGFBF3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, or inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an inflammation is useful for ameliorating the effects of psoriasis, response of the present invention (see AAF45151 and AAF45153- F45161). The method is useful for ameliorating the effects of psoriasis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                  Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 1 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                              Edmondson SR
                                                                                                                                                                                                                                                                                                                                                              Example 6; Page 34; 201pp; English.
                                                                                                                                                                              (MURD-) MURDOCH CHILDRENS RES INST.
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                                                                                                             21-JUN-2000; 2000WO-AU000693
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGCACCTGCC 760
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                                                                                                                                                                                                                                               WPI; 2001-041421/05.
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                                               WO200078341-A1.
                 Homo sapiens.
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                                                                               28-DEC-2000.
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Edmondson SR

Wraight CJ, Werther GA,

WPI; 2001-041421/05

inflammation.

(MURD-) MURDOCH CHILDRENS RES INST.

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                                                                                                                                                                                                                                                                                                     The present invention relates to a method for ameliorating the effects of antisense oligomucleotide, (for Insulin-like Growth Factor [IGF] and receptor, IGF binding protein [IGFBP] or IGFBP3), which is capable inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomucleotide which can be used to design the antisense oligomucleotide which can be used to design the antisense oligomucleotides of the present invention (see AAF45151 and AFF45153 oligomucleotides of the present invention (see AAF45151 and AFF45153 oligomucleotides of the present invention (see AAF45151 and AFF45153 oligomucleotides of the present invention (see AAF45151 and AFF45153 oligomucleotides), pityriasis, ruba, pitaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a neoplasia and every scular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                              Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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100.0%; Pred. No. 8.1e+02;
iive 0; Mismatches 0;
                                                                                                                                    Edmondson SR;
                                                                                                     MURD-) MURDOCH CHILDRENS RES INST.
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                                          21-JUN-2000; 2000WO-AU000693
                                                                         99US-0140345P
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                                                                                                                                    CJ, Werther GA,
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                                                                                                                                                                   WPI; 2001-041421/05
                                                                                                                                                                                                                                               inflammation.
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                                                                         21-JUN-1999;
             28-DEC-2000.
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an anticontent dispancelectied, (for Insulin-like Growth Factor Insulin-like Growth Factor Insulin-content of Enderth is capable of inhibiting or reducing prowth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligomuclectide which can be used to design the antisense oligomuclectide which can be used to design the antisense oligomuclectide which can be used to design the antisense oligomuclectide with a present invention (see AAF45151 and AAF45153 oligomuclectide with invention (see AAF45151 and AAF45153 oligomuclectides of the present invention (see AAF45151 and AAF45153 oligomuclectides) privatisals, privatisals, plants, plants, serborrhoes, keloids, keratosis, neoplasts, scleroderma, warts, benign growths, cancers of the skin, a hypernecvascular condition such as a neovascular condition of the retina, disease, kidney disease, hyperproliferation of the inside of blood customers of the series or any other hyperplasia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 11; DB 1; Length 15;
100.0%; Pred. No. 8.1e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 1 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
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Example 6; Page 34; 201pp; English.
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AAF45603 standard; DNA; 15
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ses 11; Conservative
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Matches
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21-JUN-2000; 2000WO-AU000693.

WO200078341-A1

Homo sapiens

Edmondson SR

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGP] - receptor, IGF binding protein [IGFBP] - 2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, of inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the affects of psoriasis, stainly sis, pityriasis, ruba, pilaris, serborthoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, the brian or skin, growth factor—mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood to sessels or any other hyperplasia
                                                                     Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     O.5%; Score 11; DB 1; Length 15; Local Similarity 100.0%; Pred. No. 8.1e+02; les 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 1 A; 5 C; 8 G; 1 T; 0 U; 0 Other;
                                                                                                                                                          Example 6; Page 36; 201pp; English.
               Wraight CJ, Werther GA,
                                              WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S:
Matches 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAF48824;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1429
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AAF48825 Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; Keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pitzyiasis; IGF binding proctein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keartosis; neoplasais; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis, kidney disease; neoblasis, condition; the retina; ss. AAF48824 standard; DNA; 15 BP. IGFBP3 oligonucleotide #2244. 21-JUN-2000; 2000WO-AU000693 30-MAR-2001 (first entry) 1049 AGCCCCTGGCC 1059 Н 11 AGCCCCTGGCC WO200078341-A1 Homo sapiens 28-DEC-2000.

Edmondson SR;

Wraight CJ, Werther GA,

WPI; 2001-041421/05

(MURD-) MURDOCH CHILDRENS RES INST.

21-JUN-1999;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis, IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis, neoplasia; scleroderma, wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                 The present invention relates to a method for ameliorating the effects of artisense oligonucleotide, (for Insulin-like Growth Factor [IGF] artisense oligonucleotide, (for Insulin-like Growth Factor [IGF]) areceptor, IGF binding protein [IGFBP] - 2 or IGFBP3), which is capable inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153 - 745161). The method is useful for ameliorating the effects of psoriasis, inhyporaeotides, bully plants, sephorthoea, Keloids, keratosis, inhyporaeovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, hyperproliferation of the inside of blood
           Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 7 A; 5 C; 3 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 11; DB 1; Le; Pred. No. 8.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Pred. No. 8.1
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                                                                                                       Example 7; Page 58; 201pp; English
                                                                                                                                                                                                                                                                                                                                                                                                   vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 묤.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IGFBP3 oligonucleotide #2245.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-JUN-2000; 2000WO-AU000693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF48825 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1060 CCAAACCCAAG 1070
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 CCAAACCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-JUN-1999;
                                                                    inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-DEC-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF48825;
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Gaps ö

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomuclectide, (for Insulin-11ke Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBB]-2 or IGFBB3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomuclectide which can be used to design the antisense oligomuclectide which can be used to design the antisense oligomuclectides of the present invention (see AAF45151 and AAF45153-156161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperiacyscular condition used as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to oligonucleotides based on nucleotide sequences obtained from both wild-type tubercle bacilli (wtTB) that are susceptible to a drug and mutent-type tubercle bacilli (mtTB) that are resistant to a drug. The drugs used in the present invention are rifampicin (RRP), streptomycin (SM), kanamycin (KM), isoniazid (INH) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New oligonucleotides, nucleic acid probes and primers are useful for differentiating drug-resistance and determining infection with tubercle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tubercle bacillus; drug sensitivity; drug resistance; rifampicin; streptomycin; kanamycin; isoniazid; ethambutol; rpoB gene; rrs gene; rpsL gene; inhA gene; katG gene; embB gene; probe; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                  0.5%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 8.1e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 7 A; 5 C; 3 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mutant capture oligonucleotide #17.
                                      Example 7; Page 58; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Takenishi
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                                                                                                                                                                                                                                                                                                                                                          vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВЪ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-AUG-2000; 2000EP-00306563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99JP-00220357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mycobacterium tuberculosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF95024 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (NISN ) NISSHINBO IND INC. (SYST-) SYSTEM RES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1060 CCAAACCCAAG 1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAAACCCAAG 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-246696/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-AUG-1999;
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inflammation
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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ethambutol (EB). The rpoB gene is responsible for resistance to RFP; the rrs gene is responsible for resistance to SM and KW; the rpsL gene is responsible for resistance to SM; the inhA gene is responsible for resistance to INH; the kacG gene is responsible for resistance to INH; and the embB gene is responsible for resistance to INH; and the embB gene is responsible for resistance to INH; and the crades to nucleic acid probes having part of a nucleotide sequence of tubercle bacilli (TB) responsible for drug resistance and primers used to generate the probes. The present sequence is an objection of the present invention. The oligonucleotides of the present invention. The oligonucleotides of the present invention of the present invention of the present invention of backing the determination of infection with tubercle bacilli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a method for haplotyping the human phospholipid transfer protein (PLTP) gene, involving determining the identity of the nucleotide present at one or more of the 25 polymorphic sites within the gene. This can be used to aid drug development for the treatment of diseases associated with different haplotypes of the PLTP gene, possibly including atherosclerosis. The present sequence is an allele-specific primer used for detecting polymorphisms in the PLTP gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genotyping phospholipid transfer protein gene of individual for haplotyping individual's gene, comprises determining identity of nuclectide pair at polymorphic sites for two copies of PLTP gene present in the individual.
                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, phospholipid transfer protein, PLTP; SNP, atherosclerosis, single nucleotide polymorphism, high-density lipoprotein metabolism; allele-specific oligonucleotide; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human phospholipid transfer protein gene ASO primer SEQ ID NO: 39.
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0
                                                                                                                                                                                                                                                                                                   Length 15;
                                                                                                                                                                                                                                                                                                                                         0; Indels
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                                                                                                                                                                                                                                                              Sequence 15 BP; 1 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                 0.5%; Score 11; DB 1; Le
100.0%; Pred. No. 8.1e+02;
:ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 15; Page 13; 98pp; English.
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ABA81590 standard; DNA; 15
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                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                          Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                             11;
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                                                                                                                                                                                                                                                                                                       Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1432
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              883000000000088
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0.5%; Score 11; DB 1; Length 15; 84.6%; Pred. No. 8.1e+02;

Best Local Similarity

Query Match

Human NPYIR gene allele-specific oligonucleotide sequencing primer #6

14-FEB-2002 (first entry)

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genotyping human Growth hormone releasing hormone receptor gene of individual for determining haplotype of individual by determining identity of nucleotide pair at specific polymorphic sites for two copies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
 Gaps
                                                                                                                                                                                                                                                               Human; single nuclectide polymorphism; SNP; GHRHR; chromosome 7p14; growth hormone releasing hormone receptor; haplotyping; genotyping; isolated growth hormone deficiency; IGHD; pituitary adenoma; ASO; allele-specific oligonucleotide; probe; ss.
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 Indels
                                                                                                                                                                                                                                     ASO probe #5 to detect human GHRHR gene polymorphisms.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nandabalan K,
 Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                             17-APR-2001; 2001WO-US012453.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-APR-2000; 2000US-0197978P.
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                                                                                                                                         AAS19613 standard; DNA; 15
                              749 TGTGCACCTGCCA 761
                                                                                                                                                                                                       (first entry)
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   11; Conservative
                                                          14 YGTGCGCCTGCCA 2
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                                                                                                                                                                                                                                                                                                                                                                               WO200179239-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polymorphisms
                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                       26-MAR-2002
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                                                                                                                                                                                                                                                                                                                                                                                                               25-OCT-2001
                                                                                                                                                                           AAS19613;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chew A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of gene
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ID AAS95
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AC AAS95
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The invention relates to single nucleotide polymorphisms in the human neuropeptide Y receptor Y1 (NPYIR) gene. A method for haplotyping the neuropeptide Y receptor Y1 (NPYIR) gene. A method for haplotyping the NPYIR gene in an individual comprises identifying the nucleotide at one of more polymorphic sites and determining whether one of the copies of the gene is defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pair. This method is useful in genotyping, whereby all possible haplotype pair. This method is useful in genotyping, whereby all possible haplotype pair. The haplotype or haplotype pair of the NPYIR gene can be identified by comparing the frequency of the haplotype or haplotype pair. NPYIR and its corresponding DNA are used for studying the expression and function of NPYIR, for use in screening or cardiovascular diseases (e.g. hypertension) and depression. The sequences are also useful for studying the effect of variation on the biological activity of NPYIR s well as on the binding affinity of cardioate darugs crangeting NPYIR sequences AASSDS63-AASSDS63 represent allale-specific oligonucleotide probes, sequencing primers, PCR primers and PCR primer culversal tails used to detect NPYIR gene polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                   Human; neuropeptide Y receptor Y1; NPY1R; ss; antiarteriosclerotic; haplotyping; haplotype pair; single nucleotide polymorphism; genotyping; gene therapy; drug screening; cardiovascular disease; antidepressant; hypertension; cardiant; depression; probe; sequencing primer; PCR primer; PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated polynucleotide variant of neuropeptide Y receptor Y1 (NPYIR) for studying the function of NPYIR, and expressing NPYIR protein for use in screening candidate drugs to treat NPYIR-related diseases.
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AAD26057 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Koshy B,
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                                                                                                                                                                                                                                                                                                                                         07-MAY-2001; 2001WO-US014773
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ses 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                      (GENA-) GENAISSANCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Choi JY, Kliem SE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-055579/07
                                                                                                                                                                                                                                                          WO200185742-A2.
                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                15-NOV-2001.
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Matches 11
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AAD26057/c
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Human; antilipaemic; neuroprotective; nootropic; genetic variant; APOE; papolipoprotein E; haplotyping; familial dysbetalipoproteinaemia; therapy; genotyping; type III hyperlipoproteinaemia; Alaheimer's disease; atherosclerosis; polymorphism; allele specific oligonucleotide;
                                                                                                                                                                                                                                                                                     Genotyping human apolipoprotein gene of individual for determining haplotype of individual, involves determining identity of nucleotide pair at specific polymorphic sites for two copies of gene.
                    Human apolipoprotein E (APOE) gene polymorphism detecting ASO primer #8
                                                                                                                                                                                                                                             Lee HH;
                                                                                                                                                                                                                                                                                                                                     Claim 16; Page 14; 78pp; English.
                                                                                                                                                                                                                                             Koshy B,
                                                                                                                                                                             16-APR-2001; 2001WO-US012303.
                                                                                                                                                                                                                       (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                 14-APR-2000; 2000US-0197188P.
(first entry)
                                                                                                                                                                                                                                                                   WPI; 2002-075064/10.
                                                                                                                                                                                                                                              Choi JY, Kliem SE,
                                                                                                                                  WO200179234-A2.
                                                                                       ASO primer; ss.
                                                                                                             Homo sapiens.
                                                                                                                                                      25-OCT-2001.
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The patent discloses novel genetic variants of human apolipoprotein E (APOE) gene. The invention also relates to compositions and methods for haplotyping and/or genotyping the APOE gene. The haplotyping methods of the invention are useful for improving the efficacy and reliability of several steps in the discovery and development of drugs for treating diseases associated with APOE activity, e.g. familial dyspetalipoproteinaemia, type III hyperlipoproteinaemia atherosclerosis, and Alzheimer's disease. They are useful to validate APOE as a candidate agent for treating a specific condition or disease predicted to be associated with APOE activity and in the design of clinical trials of candidate drugs for treating a specific condition or disease predicted to be associated with APOE activity. Genotyping or haplotyping methods are useful to screen for compounds targeting APOE activity. The present DNA sequence is an allele specific oligonucleotide (ASO) primer which is used for detecting human APOE gene polymorphisms Sequence 15 BP; 2 A; 3 C; 7 G; 2 T; 0 U; 1 Other; Similarity

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Gaps
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0.5%; Score 11; DB 1; Length 15; 84.6%; Pred. No. 8.1e+02; ive 1; Mismatches 1; Indels
                                                                         1236 AGCCCTCGCCTCC 1248
                                      11; Conservative
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15 ASCCCTGGCCTCC 3 ò d

Human CHRNE allele-specific oligonucleotide (ASO) primer, SEQ ID NO:36.

Human, cholinergic receptor nicotinic epsilon polypeptide, CHRNE, chromosome 17p13-12; acetylcholine receptor; AChR, neuromuscular junction; skeletal muscle; postnatal development;

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The invention relates to a method for haplotyping the cholinergic receptor, nicotinic, epsilon polypeptide (CHRNE) gene (AB188268) of an individual, and also describes 17 novel polymorphic sites within the human CHRNE gene. The CHRNE gene is located on chromosome 17pi3-12 and contains 12 exons which encode a 493 amino acid protein (ABB49112). The CHRNE protein is one of the 5 subunits of mammalian acetylcholine adults, and is essential for the normal postnatal development of skeletal adults, and is essential for the normal postnatal development of skeletal wisttenions in the CHRNE gene are associated with congenital compact of CHRNE gene is also useful for studying the expression of CHRNE, and in expressing CHRNE protein for use in gene therapy. The CHRNE gene is also useful for studying the expression of CHRNE, and in expressing CHRNE protein for use in an extending the crandidate drugs to treat diseases related to CHRNE. The method of the invention is useful for haplotyping the CHRNE gene in an extension of the invention also be used in pharmaceutical research to validate crandidate drugs for, treating a specific condition drugs or disease condidate drugs for, treating a specific condition drugs of disease confident to be associated with CHRNE scivity such as CMS. Polymorphisms of primer extension using oligomodecated with CHRNE scivity and reliability of several steps in the discovery and reliability of several steps in the discovery and ethiospan of drugs for treating diseases associated with CHRNE sequences of discomment of drugs for treating diseases essociated with CHRNE sequences activity, and may be used to screen drugs which target CHRNE. Sequences activity, and may be used to screen drugs which target CHRNE. Sequences of Sulganza or propersent specifically claimed allele-specific
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congenital myasthenic syndrome, CMS; haplotyping; genotyping; haplotype; genetic variant; single nucleotide polymorphism; SNP; gene therapy; drug screening; allele-specific oligonucleotide; ASO; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel genetic variants of cholinergic receptor, nicotinic, epsilon polypeptide gene useful in studying expression and function of the protein, and for screening drugs to treat diseases e.g. congential
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34.6%; Pred. No. 8.1e+02;
Lve 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                Tanguay DA;
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                                                                                                                                                                                                                                                                                                                                                                   Koshy B,
                                                                                                                                                                                                                                                                                                                                                                     Bieglecki KM, Kliem SE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 17; Page 14; 104pp; English
                                                                                                                                                                                                                                                                                                                        (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                    20-JUN-2001; 2001WO-US019835.
                                                                                                                                                                                                                                                                               20-JUN-2000; 2000US-0212870P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 myasthenic syndrome.
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                                                                                                                                           WO200198316-A2
                                                                                                    sapiens
                                                                                                                                                                                        27-DEC-2001.
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Matches
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멾 AAD32200 standard; DNA; 15 RESULT 1437 AAD32200 ID AAD3 XX AC AAD3 XX

AAD32200,

Human PER1 allele specific oligonucleotide probe SEQ ID NO:16.

(first entry)

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Query Match 0.5%; Score 11; DB 1; Length 15; Best Local Similarity 84.6%; Pred. No. 8.1e+02;
           Human NFKBIB gene polymorphism detecting ASO primer #13
                                                                                                                                                                                                                                                                                                                        Seguence 15 BP; 5 A; 3 C; 5 G; 1 T; 0 U; 1 Other;
                                                                                                                                                                  Claim 16; Page 13; 71pp; English
                                                                                                       (GENA-) GENAISSANCE PHARM INC.
                                                                                 03-AUG-2001; 2001WO-US024303.
                                                                                            03-AUG-2000; 2000US-0222552P.
                                                                                                                   Choi JY, Kazemi A,
                                                                                                                              WPI; 2002-269091/31.
                                                         WO200212497-A2
                                              Homo sapiens.
                                                                    14-FEB-2002.
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Koshy B;

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The present invention describes an isolated human period (Drosophila)
homologue 1, (PER1) polymucleotide (I) comprising a sequence which is a
homologue 1, (PER1) polymucleotide (I) comprising a sequence which is a
correct the present for a reference sequence (ABL52079) for the PER1 gene
or its fragment, or a polymorphic variant of a reference sequence
(ABL52078) for a pert oblymorphic variant. The present invention also
describes methods for genotyping and haplotyping the PER1 gene of an
individual. (I) is useful in studying the expression and function of
PER1, and in expressing PER1 protein for use in screening for candidate
drugs to treat diseases related to PER1 activity. (I) is useful for
therapeutic purposes. A recombinant non-human organism transformed or
transfected with (I) can be used for studying expression of the PER1
isogenes in vivo, for in vivo screening and testing of drugs targeted
against PER1 protein, and for testing the efficacy of therapeutic agents
and compounds for disorders associated with circadian rhythm regulation.
The present sequence represents an allele specific oligonucleotide probe
for human PER1, which is used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; Cytochrome P450; Subfamily XXVIIA; single nucleotide polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel isolated human period Drosophila homolog 1 polynucleotide, useful for therapeutic purposes, for studying the expression and function of the polynucleotide, and for expressing the homolog.
                                                                                                                                                                                                                                                                                   /note= "polymorphic site indicated by an ambiguity base"
                                       Human; period (Drosophila) homologue 1; PER1; polymorphic variant;
polymorphic site; genotyping; haplotyping; circadian rhythm regulation;
single nucleotide polymorphism; SNP; gene; probe; ss.
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84.6%; Pred. No. 8.1e+02;
ive 1; Mismatches 1; Indels
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                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 17; Page 14; 162pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-SEP-2000; 2000US-0232468P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-SEP-2001; 2001WO-US028780.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Koshy B;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Duda A, Kliem SE,
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                                                                                                                                                                                                                                                                                                                                                    WO200222650-A2
                                                                                                                                                                                                               Key
misc_feature
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                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                    21-MAR-2002.
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ABK81922/c
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2×2×2×2×2×2×2×2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a polymucleotide sequence comprising a human nuclear factor of kappa light polypeptide gene enhancer in B-cells chibitor, beta (NFRBIB) isogene. The NFRIBI is useful for screening for drugs and therapeutic purposes. The polymorphism and haplotype data is useful for validating whether NFRBIB is a suitable target for drugs to treat disorders of immune system, screening for such drugs and reducing bias in clinical trials of such drugs. NFRBIB is useful in studying the effect of variation on the biological activity of NFRBIB as well as on the binding affinity of candidate drugs. NFRBIB is useful in studying the system. The isolated monoclonal antibody is useful for diagnostic and prognostic formats and therapeutic methods. The genotyping method is useful for deapnostic and applotype pair. The haplotyping method is useful for improving efficiency and outcome of several steps in discovery and development of drugs for treating diseases associated with NFRBIB activity such as disorders of immune system. The haplotyping method is also useful for validating or predicted to be associated with NFRBIB activity. The method is also useful for screening compounds to treating a specific condition or disease consecution of the associated with NFRBIB activity. The method is also useful in the careful on chromosome 19013.1. The present sequence is human NFRBIB gene poymorphism detecting ASO (allele-specific coligonucleotide) primer
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                                                                                                         Human, drug screening, polymorphism, haplotype, immune system disorder, nuclear factor of kappa light polypeptide gene enhancer; beta gene; B.cell inhibitor; NFKBIB; gene therapy; chromosome 19q13.1; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel human Nuclear Factor of Kappa Light Polypeptide Gene Enhancer in
Cells Inhibitor, Beta, (NFKBIB) gene polymorphic variants, useful for
screening drug candidates to treat disorders of the immune system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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Gaps

1; Indels

Mismatches

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11; Conservative

871 GAGGACTCAGGCA 883

GAGAACTCAGGCR 14

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ABL52091 standard; DNA; 15 BP

(first entry)

12-JUL-2002

RESULT 1438
ABL52091
ID ABL52093
XX
XX
DT 12-JUL-:

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The present invention relates to a new human Cytochrome P450, Subfamily XXVIIA, (Steroid 27-Hydroxylase, Cerebrocendinous Xanthomatosis) Polypoptide I (CYP27-Hydroxylase, The polymorphic variant for a reference sequence which is a polymorphic variant for a reference sequence for the CYP27A1 gene or its fragment, or a polymorphic variant of a reference sequence for a CYP27A1 Gene or its fragment. The invention is useful for screening for drugs by contacting the CYP27A1 polymorphic variant with a candidate agent and assaying for binding a cativity. The invention is also useful in studying the expression and function of CYP27A1, and in expressing CYP27A1 protein for use in screening for candidate drugs to treat diseases related to CYP27A1 cativity, e.g. cerebrotendinous xanthomatosis. Other uses include for therapeutic purposes and for studying expression of the CYP27A1 isogenes in vivo screening and testing of drugs targeted against CYP27A1 protein, and for testing the efficacy of therapeutic agents and compounds for diseases associated with CYP27A1 activity, e.g. cerebrotendinous wanthomatosis. The invention is useful for studying the efficacy of therapeutic agents and cativity of CYP27A1 as well as on the binding affinity of candidate drugs crayered muchelc acid sequence represents one of a collection contact of the present nucleic acid sequence represents one of a collection of the human CYP27A1 activity of candidate drugs ware used in the invention to detect polymorphisms in the human CYP27A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel isolated human Cytochrome P450, Subfamily XXVIIA, Steroid 27-Hydroxylase, Cerebrotendinous Xanthomatosis 1 gene, useful for therapeutic purposes, and for studying expression and function of the
  Steroid 27-Hydroxylase; Cerebrotendinous Xanthomatosis Polypeptide 1;
                           CYP27A1; SNP; drug screening; cerebrotendinous xanthomatosis; allele specific oligonucleotide; ASO; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                          Han J, Sanchis A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 14; Page 14; 90pp; English.
                                                                                                                                                                                                                                     15-OCT-2001; 2001WO-US042727.
                                                                                                                                                                                                                                                                                                                              (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                               .3-OCT-2000; 2000US-0239942P.
                                                                                                                                                                                                                                                                                                                                                                          Anastasio AE, Chew A,
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                                                                                                                                       WO200230952-A2
                                                                                             Homo sapiens,
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Gaps
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                                    0.5%; Score 11; DB 1; Length 15;
84.6%; Pred. No. 8.1e+02;
tive 1; Mismatches 1; Indels
Sequence 15 BP; 5 A; 0 C; 6 G; 3 T; 0 U; 1 Other;
                                  Query Match
Best Local Similarity 84.6
Matches 11, Conservative
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BP. 924 CCTTTTATCCCTC 936 AAS98702 standard; DNA; 15 (first entry) 14 YCTATTATCCCTC 2 26-MAR-2002 AAS98702; ò g

Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #68.

The invention describes a novel isolated polymucleotide (I) comprising a sequence which is a polymorphic variant (PV) of a reference sequence for colony stimulating factor I receptor (CSPIR) gene, found on Thee CC colony stimulating factor I receptor (CSPIR) gene, found on Thee CC polypeptide are useful for improving the discovery and development of malignant historycosis, myeloid malignancies, and inflammatory disorders and the haplotypes can be used to validate CSPIR activity, e.g., and the haplotypes can be used to validate CSPIR, as a candidate target for treating a specific condition or disease predicted to be associated with CSFIR activity. Genotyping the CSFIR gene of an individual can also consequent in studying the expression and function of CSFIR, and in CC treat diseases related to CSFIR series and therapeutic treatments. (I) is useful in studying the expression and function of CSFIR, and in cudying the effect of the variation on the biological activity of GSFIR. Antibodies are binding affinity of diagnostic and prognostic formats and therapeutic useful as variety of diagnostic and prognostic formats and therapeutic CSFIR isogenes in vivo, for in vivo screening activity of GSFIR series of CSFIR procein, and for testing the efficacy of therapeutic agents and ormpounds. Allele specific oligonucleotides (ASO) care useful as probes and primers, and for testing the efficacy of therapeutic agents and compounds that are more likely to show method for identifying lead compounds that are more likely to show ceffect of any particular CSFIR or haplotype the invention provides a coligonucleotide primer used for detecting CSFIR gene polymorphisms, coligonucleotide primer used for detecting CSFIR gene polymorphisms, and the march of the march of the invention. Novel polymorphic variants of colony stimulating factor 1 receptor useful in studying expression and function of the protein, useful for screening candidate drugs to treat diseases e.g. inflammatory disorders. Colony stimulating factor 1 receptor; CSFIR; polymorphic variant; cytostatic; gene therapy; malignant histocytosis; isogene; myelolid malignancy; inflammatory disorder; transgenic animal; haplotype; genotype; human; allele specific oligonucleotide; ASO; primer; ss. Gabe ò 0.5%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 8.1e+02; tive 0; Mismatches 0; Indels Sequence 15 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 1 Other; described in the method of the invention Claim 15; Page 16; 164pp; English. (GENA-) GENAISSANCE PHARM INC. 12-APR-2001; 2001WO-US012044. 12-APR-2000; 2000US-0196411P. AAS98768 standard; DNA; 15 1295 AGCCACAGAGC 1305 Query Match 0.5 Best Local Similarity 100. Matches 11; Conservative 12 AGCCACAGAGC WPI; 2002-075058/10. Choi JY, WO200179225-A2 Homo sapiens 25-OCT-2001 AAS98768; Chew A, RESULT 1441 AAS98768 셤 ઠે

(first entry) 26-MAR-2002 SXXXE

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schultz451-1.rng

Human, ubiquitin protein ligase B3A, UBB3A, haplotype, SNP, gene therapy, Angelman syndrome, human papilloma virus B6-associated gene, single nucleotide polymorphism, PCR primer; ss.

Human UBE3A gene ASO PCR primer SEQ ID NO: 49.

(first entry)

19-APR-2002

ABL45682;

```
Novel polymorphic variants of colony stimulating factor I receptor useful in studying expression and function of the protein, useful for screening candidate drugs to treat diseases e.g. inflammatory disorders.
                             Colony stimulating factor 1 receptor; CSF1R; polymorphic variant; cytostatic; gene therapy; malignant histiocytosis; isogene; myeloid malignancy; inflammarcry disorder; transgenic animal; haplotype; genotype; human; allele specific oligonucleotide; ASO; primer; ss.
          Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #134.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 2 A; 9 C; 2 G; 1 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       described in the method of the invention
                                                                                                                                                                                                                                                                                                   Claim 15; Page 16; 164pp; English.
                                                                                                                                                                                          (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                 12-APR-2001; 2001WO-US012044.
                                                                                                                                                                    .2-APR-2000; 2000US-0196411P.
                                                                                                                                                                                                                                    WPI; 2002-075058/10
                                                                                                                                                                                                                Choi JY,
                                                                                                      WO200179225-A2
                                                                                   Homo sapiens.
                                                                                                                           25-OCT-2001
                                                                                                                                                                                                                Chew A,
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Novel genetic variants of ubiquitin protein ligase E3A gene useful in studying expression and function of the protein, and for screening drugs to treat diseases e.g. Angelman syndrome.

Claim 17; Page 14; 95pp; English.

Kliem SE, Koshy B, Sausker EA;

Duda A,

WPI; 2002-130535/17.

(GENA-) GENAISSANCE PHARM INC

01-JUN-2001; 2001WO-US017994 01-JUN-2000; 2000US-0208539P

WO200192582-A1.

06-DEC-2001.

Homo sapiens,

The present invention provides the sequences of fragments of the human ubiquitin protein kinese E3A (human papilloma virus E6-associated protein) UBE3A coding sequence and protein. Also described are a number of single nucleotide polymorphisms (SNPs) identified within these fragments. The fragments can be used in the gene therapy of Angelman syndrome and to haplotype the UBE3A gene. The present sequence is an allele specific primer for a coding sequence fragment of the invention

Sequence 15 BP; 4 A; 1 C; 5 G; 4 T; 0 U; 1 Other;

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The invention describes a novel isolated polynuclectide (I) comprising a sequence which is a polymorphic variant (PV) of a reference sequence for colony stimulating factor I receptor (CSFIR) gene, found on The following stimulating factor I receptor (CSFIR) gene, found on The drugs for treating diseases associated with CSFIR activity, e.g., and inflammatory disorders and the haplotypes can be used to validate CSFIR activity, e.g., and the haplotypes can be used to validate CSFIR activity, e.g., with CSFIR activity. Genotyping the CSFIR pence of an individual can also be used in developing disgnostic tests and therapeutic treatments. (I) is useful in studying the expression and function of CSFIR, and in corpressing CSFIR protein for use in screening for candidate drugs to treat diseases related to CSFIR activity and in studying the effect of the variation on the biological activity of CSFIR. Antibodies are binding affinity of candidate drugs targeting CSFIR. Antibodies are cuseful in a variety of disanostic and prognostic formats and therapeutic comethods. A transgent animal is useful in studying expression of the CSFIR probes and primers, and for testing the efficacy of therapeutic agents and compounds. Allele specific oligonuclectides (ASO) are useful as probes and primers, and for testing the efficacy of therapeutic agents and compounds. Allele specific oligonuclectides are method for identifying lead compounds that are more likely to show the control of the primers used for detecting CSFIR gene polymorphisms, and entered against that are useful as probes and primers. This sequence is an allele specific oligonuclectide primer used for detecting CSFIR gene polymorphisms, and activity and activity and an allele specific.
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                                                                                                   Gaps
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0
0.5%; Score 11; DB 1; Length 15; 34.6%; Pred. No. 8.1e+02;
                                                                                        1; Indels
                                                                                                        1; Mismatches
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                                                    84.6%;
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                                                                                                                                                                                                996 TIGIGGGAAATCG 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABL57628 standard; DNA; 15
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                                                         Local Similarity
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          Query Match
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AC ABL57
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DY 08-0-0
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DY 08-0-0
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KW SCYA
KW
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0.5%; Score 11; DB 1; Length 15; 84.6%; Pred. No. 8.16+02; ive 1; Mismatches 1; Indels

1074 CAGTCCCACTCCA 1086 CAGCCCCACTCCR 14

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11; Conservative

Query Match Best Local Similarity Matches 11, Conserv

ABL45682 standard; DNA; 15 BP.

RESULT 1442 ABL45682 ID ABL45682 XX

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New genetic variants comprising haplotypes of the small inducible cytokine subfamily A, member 21 (SCYA21) gene, useful in improving the efficiency of screening for drugs for treating immunological disorders or for targeting SCYA21.
                                                                                                                                                                                                             The invention relates to a novel isolated polynucleotide comprising a small inducible cytokine subfamily A (cys-cys), member 24 (SCYA24) isogene. The polypeptide of the invention has antiasthmatic activity. The polynucleotide may have a use in gene therapy. The polynucleotide and polynucleotide are useful in the the development of drugs for treating diseases associated with SCYA24 activity, e.g. respiratory inflammatory diseases such as asthma. Allele-specific oligonucleotide (ASO) primers used for detecting polymorphisms in the SCYA24 gene are represented in ABLS7616-ABLS7645
                                                                                                            New genetic variants of small inducible cytokine subfamily A member 24 gene, useful in studying expression and function of the protein, and for screening drugs to treat diseases such as asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Small inducible cytokine subfamily A (Cys-Cys) member 21; SCYA21; polymorphism; haplotype; immunological disorder; gene expression; drug development; immunomodulator; allele specific oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SCYA21 gene allele specific oligonucleotide primer #7.
                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 1 A; 3 C; 5 G; 5 T; 0 U; 1 Other;
                                                                                                                                                                                Claim 16; Page 14; 98pp; English
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                (GENA-) GENAISSANCE PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 100 tes 11; Conservative
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                                                Han J,
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                                                                              WPI; 2002-351785/38
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                                                Anastasio AE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CXSXTTTTTXSXTXBXBXBXSXXXXXXBXBXBXCX
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8
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BP.

The invention describes an isolated polynucleotide, which comprises genes

Claim 14; Page 13; 56pp; English.

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and haplotypes of the small inducible cytokine subfamily A (Cys-Cys),
member 21 (SCYA21) gene. The polynucleotide comprises polymorphic sites
referred to as PSI-5 to designate the order in which they are located in
the gene. The polymorphisms and haplotypes of SCYA21 gene are useful for
validating whether SCYA21 is a suitable target for drugs to treat
immunological disorders and disorders associated with its abnormal
expression or function, screening for such drugs and reducing bias in
clinical trials of such drugs. Haplotype information would be useful in
improving the efficiency and output of several steps in the drug
discovery and development process, including target validation,
identifying lead compounds and early phase clinical trials. The methods
are useful in screening for compounds targeting SCYA21 to treat a
specific condition or disease predicted to be associated with SCYA21
cativity, e.g. immunological disorders. This sequence represents an
in the SCYA21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention describes an isolated human pyridoxal (pyridoxine, vitamin B6) kinase, (PDXK) polynucleotide. The polynucleotide is useful in studying the expression and function of PDXK, and in expressing PDXK protein for use in screening for candidate drugs to treat PDXK related diseases and for therapeutic purposes. A transgenic animal is useful for studying expression of the PDXK isogenes in vivo, for in vivo screening and testing of drugs targeted against PDXK protein, and for testing the efficacy of therapeutic agains and compounds for autoimmune polyglandular disease type 1. The polypeptide is useful for studying the effect of the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Isolated human pyridoxal (pyridoxine, vitamin B6) kinase polyNts, useful for therapeutic purposes, for studying the expression and function of the polyNt, and for expressing pyridoxal protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pyridoxal kinase; pyridoxine; vitamin B6;
PDXK autoimmune polyglandular disease type 1; transgenic animal;
gene therapy; allele specific oligonucleotide; ASO; PCR primer; s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pyridoxal (Pyridoxine, vitamin B6) Kinase (PDXK) PCR primer #19
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0
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                                                                                                                                                                                                                                                                                                                                                 Seguence 15 BP; 4 A; 8 C; 1 G; 1 T; 0 U; 1 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                                                               in the SCYA21 gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200190125-A2.
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Best Local &
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Gaps

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0.5%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 8.1e+02; ive 0; Mismatches 0; Indels

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variation on the biological activity of PDXK and the binding affinity of candidate drugs targeting PDXK for the treatment of autoimmune polyglandular disease type 1. Genoryping and haplotyping is useful for improving the efficacy and reliability of several steps in the discovery and development of drugs for treating diseases associated with PDXK activity, e.g., autoimmune polyglandular disease type 1, to validate PDXK as a candidate agent for treating a specific condition or disease predicted to be associated with PDXK activity, and in the design of predicted to be associated with PDXK activity, and in the design of candidate drugs. This sequence is one of 37 (see ABK16941-ABK16977) allele specific oligonucleotide (ASO) PCR primers used for detecting PDXK gene polymorphisms, described in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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0
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                                                                                                                                                                                                                                                                                                               invention
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Matches
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Human, G-protein coupled receptor 4; GPR4; haplotyping, polymorphism; allele-specific oligonucleotide; ASO; ds. Human GPR4 isogene fragment #8

BP.

AAD26886 standard; DNA; 15

(first entry)

26-MAR-2002

AAD26886;

Homo sapiens.

WO200187904-A2.

22-NOV-2001

09-MAY-2001; 2001WO-US015097.

17-MAY-2000; 2000US-0204928P

(GENA-) GENAISSANCE PHARM INC.

Koshy B; Kazemi A, Duda AE, Bentivegna SC,

WPI; 2002-097579/13

Haplotyping, (H1), the G-protein coupled receptor 4 (GPR4) gene of an individual, comprising determining which haplotype an individual.

Example 2; Page 31; 61pp; English.

The invention relates to G-protein coupled receptor 4 (GPR4) gene variants. The data about the GPR4 polynucleotides and polypeptides and the polymorphisms associated with them are useful for haplotyping at the GPR4 locus. Allele-specific oligonucleotide (ASO) is useful as probes and primers for assaying a polymorphism in GPR4 gene. The present sequence is human GPR4 isogene fragment

Sequence 15 BP; 4 A; 7 C; 2 G; 2 T; 0 U; 0 Other;

Gaps . 0 Query Match 0.5%; Score 11; DB 1; Length 15; Best Local Similarity 100.0%; Pred. No. 8.1e+02; Matches 11; Conservative 0; Mismatches 0; Indels

1249 GACCCCATCC 1259

à

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4 GACCCCATCCC 14
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g

RESULT 14 AAS99152/

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UDP glycosyltransferase 1 (UGT1A1) allele-specific oligonucleotide #19
BP.
AAS99152 standard; DNA; 15
       (first entry)
       12-MAR-2002
    AAS99152;
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UDP glycosyltransferase 1; UGT1A1; human; haplotyping; ss; drug discovery; Gilbert's syndrome; Crigler-Najjar syndrome; allele-specific oligonucleotide.

Homo sapiens.

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WO200179230-A2

25-OCT-2001.

13-APR-2001; 2001WO-US012273.

18-APR-2000; 2000US-0197514P.

(GENA-) GENAISSANCE PHARM INC

Choi JY, Koshy B, Rounds Chew A,

ä

WFI; 2002-075063/10.

Genotyping a human UDP glycosyltransferase 1 gene of an individual for determining the haplotype of an individual, involves determining the identity of a nucleotide pair at specific polymorphic sites for two copies of the gene.

Claim 16; Page 13; 81pp; English.

The invention relates to genotyping a human UDP glycosyltransferase (UGTIA1) gene of an individual, involving determining for the two copies of the UGTIA1 gene present in the individual, the identity of the conclection pair at one or more polymorphic sites. The new method is useful for determining whether an individual has a haplotype or haplotype pairs, given in the specification. It is useful for improving the consider of drugs for treating diseases associated with UGTIA1 as a candidate agent for treating a specific condition or disease predicted to be associated with UGTIA1 activity, and in the disease predicted to be associated with UGTIA1 activity, and in the condition or disease predicted to be associated with UGTIA1 activity. The method is useful to screen for compounds targeting uGTIA1 to treat a specific condition or disease associated with UGTIA1 activity. The condition or disease associated with UGTIA1 activity. A nucleic specific condition or disease associated with UGTIA1 activity. A nucleic condition or disease associated with UGTIA1 activity. A nucleic scid (I) comprising a polymorphic variant of a reference sequence for the UGTIA1 is useful for its fragment is useful in studying the expression and function of UGTIA1, and in expressing UGTIA1 protein for activity. (I) or (II) is useful for treat diseases related to UGTIA1 ecombinant organism comprising (II) is useful for testing the efficacy of the UGTIA1 isogenes in vivo, for in vivo screening and testing of drugs therepoutic agents and compounds for disting the efficacy of the trapeutic agents and compounds for testing the efficacy of the trapeutic agents and compounds for file trapeutic algority appressing (II) or all pene allele-specific oligonucleotides used in the marked of the invention

Sequence 15 BP; 3 A; 4 C; 4 G; 3 T; 0 U; 1 Other;

Gaps ö 0.5%; Score 11; DB 1; Length 15; 34.6%; Pred. No. 8.1e+02; ve 1; Mismatches 1; Indels 84.6%; Conservative Best Local Similarity Matches 11; Conserva Query Match

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monoamine;

Human, solute carrier family 18 member 2; SLC18A2; vesicular monoa vesicular monoamine transporter; VAAT2; polymorphic site; SNP; single nucleotide polymorphism; antiinflammatory; neuroleptic; haplotyping; genotyping; respiratory inflammatory disease; neuropsychiatric disorder; monoaminergic brain system; primer; ss.

Human SLC18A2 allele specific oligonucleotide primer SEQ ID NO:41.

(first entry)

11-JUL-2002

/*tag= a /note= "polymorphic site indicated by an ambiguity base"

Location/Qualifiers

Homo sapiens

misc_feature

Sausker EA;

Kliem SE,

Anastasio AE, Han J,

(GENA-) GENAISSANCE PHARM INC

17-SEP-2001; 2001WO-US042217.

WO200222652-A2.

21-MAR-2002.

2000US-0232895P.

15-SEP-2000;

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The present invention describes a method for identifying oligomucleotides with desired hybridisation properties to nucleic acid targets containing secondary structure. The method comprises amplifying a target nucleic acid having at least one accessible and one inaccessible site. Primers that form an extension product are identified as the oligomucleotides which can interact with the folded target nucleic acid. Oligomucleotides from the present invention can be used in novel detection methods for clinical diagnostic purposes, including the detection and identification of pathogenic organisms (e.g. HTV). The method allows the ability to rapidly analyse nucleic acid structures. ABL46034 to ABL46367 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Identifying oligonuclectides hybridizing to nucleic acids containing secondary structure, useful in clinical diagnosis, comprises identifying primers that interact with the target to form an extension product under
                                                                                                                                                                                                                                                Nucleic acid accessible hybridisation site; detection, hybridisation, characterisation, identification, nucleic acid structure, diagnosis; PCR primer; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11; DB 1; Length 15; Pred. No. 8.1e+02; 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vener IT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 6 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Neri BP,
                                                                                                                                                                                                                      Rat CX3CR1 oligonucleotide SEQ ID NO:288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (THIR-) THIRD WAVE TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 48; Fig 80A; 409pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dong F,
                                                                                                                   ABL46321 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0212308P.
2001US-00212308.
                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JUN-2001; 2001WO-US019401
                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amplification conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Syamichev V, Allawi H,
1081 ACTCCAGGCTTCA
                                15 AYTCCAGGCTGCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-JUN-2001;
                                                                                                                                                                                       26-APR-2002
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                                                                                                                                                                                                                                                                                                                             Rattus sp.
Synthetic.
                                                                                                                                                        ABL46321;
                                                                                      RESULT 1448
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The present invention describes an isolated polymucleotide (I) having a sequence (SI) comprising soluble carrier family 18 (vesicular monoamine), member 2 (SiclaBA2) isogenes with regions of a sequence (SS) of 40023 bp (see Abis1954), and defined by a corresponding set of polymorphisms whose locations and identities are given in the specification; or a sequence (S2) complementary to (SI). (I) has curinflammatory and neuroleptic activities, and can be used in gene therapy. Methods from the present invention can be used in gene therapy. Methods from the present invention can be used for haplotyping and genotyping the SIC18A2 gene in an individual. SIC18A2 is also known as the vesicular monoamine transporter (VMAT2). (I) is useful in studying the expression and function of SIC18A2, and in expressing the SIC18A2 correcting for candidate drugs to treat diseases

CC protein for use in screening for candidate drugs to treat diseases

CC protein for use in screening for candidate drugs to treat diseases

CC protein for use in screening SIC18A2 as well as on the binding affinity on the biological activity of SIC18A2 as well as on the binding affinity inflammatory diseases such as neuropsychiatric disorders involving componental process. The present sequence represents an allele specific constitution of the processor and specific (ASO) primer for human SIC18A2, which is given
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel genetic variants of soluble carrier family 18 (vesicular monoamine), member 2 gene useful for screening drugs to treat diseases e.g. neuropsychiatric disorders involving monoaminergic brain systems.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 5 A; 5 C; 3 G; 1 T; 0 U; 1 Other;
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34.6%; Pred. No. 8.1e+02;
Ive 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 17; Page 14; 183pp; English.
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Matches 11, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the present invention
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ID AAS1
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Gaps ö

0.5%; 1

11; Conservative

Similarity

Query Match Best Local

Matches

971 GGAAGTCCAAG 981

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ABL51993 standard; DNA; 15 BP.

RESULT 1449
ABL51993
ID ABL51993
XX
AC ABL51993

ABL51993

New polymorphic variants comprising interleukin-8 receptor beta (ILBRB) isogene, useful in expressing ILBRB protein for use in screening for candidate drugs to treat diseases related to ILBRB activity, e.g. inflammatory disorders.

Claim 16; Page 13; 74pp; English.

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Denton RR, Nandabalan

Choi JY,

Chew A,

Bentivegna SC,

WPI; 2002-055250/07.

(GENA-) GENAISSANCE PHARM INC 12-APR-2000; 2000US-0196734P. 12-APR-2001; 2001WO-US011942

WOZ00179221-A2

25-OCT-2001.

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Human; single nucleotide polymorphism; SNP; RANGAP1; haplotyphing chromosome 25413.2413.31; Ran GTPase activating protein 1; genotyping; cancer; irregular cell cycle associated disorder; ASO; probe; ss; allele-specific oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genotyping human Ran GTPase activating protein 1 gene of individual for determining haplotype of individual, involves determining identity of nucleotide pair at specific polymorphic sites for two copies of the gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to novel single nucleotide polymorphisms (SNPs) in the human Ran GTPase activating protein 1 (RANGAPI) gene located on chromosome 20413.2-413.1, and methods for haplotyping and/or genotyping the RANGAPI gene. The methods of the invention make use of allele-specific oligonucleotides (ASOS) as probes and primers and/or primer-extension oligonucleotides for detecting the RANGAPI gene polymorphisms. The polymucleotides and screened compounds are useful for treatment of diseases associated with RANGAPI activity, such as cancer and other disorders associated with an irregular cell cycle. AASI9704-AASI9742, represent ASO probes for detecting human RANGAPI gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human IL8RB gene allele-specific oligonucleotide sequencing primer #11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.5%; Score 11; DB 1; Length 15; Best Local Similarity 84.6%; Pred. No. 8.1e+02; Matches 11; Conservative 1; Mismatches 1; Indels
                                                                   ASO probe #35 to detect human RANGAP1 gene polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP, 3 A, 6 C, 3 G, 2 T, 0 U, 1 Other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 15; Page 14; 148pp; English
                                                                                                                                                                                                                                                                                                                                                               (GENA-) GENAISSANCE PHARM INC.
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                                                                                                                                                                                                                                                                                                                             17-APR-2000; 2000US-0198072P.
                                                                                                                                                                                                                                                                                          17-APR-2001; 2001WO-US012455
                                                                                                                                                                                                                                                                                                                                                                                                Choi JY, Koshy B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    743 ACACCGTGTGCAC 755
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                                (first entry)
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                                                                                                                                                                                          Homo sapiens.
                                08-MAY-2002
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 AAS19738;
                                                                                                                                                                                                                                                                                                                                                                                                  Chew A,
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5×5×5×5×5×5×5×5×
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The invention relates to single nucleotide polymorphisms in the human interleukin 8 receptor beta (ILBRB) gene. A method for haplotyping the interleukin 8 receptor beta (ILBRB) gene. A method for haplotyping the correct roles gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by an edited by one of the ILBRB haplotypes given in the copies seed that the same of the copies of the paper or specification or whether both copies are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pair. This method is useful in genotypes. An association between a trait and comparing the frequency of the haplotype or haplotype pair. In a corresponding by the trait population indicates the trait is associated with the haplotype or haplotype pair. ILBRB and its corresponding by expression and function of ILBRB activity, such as chronic obstructive pulmonary diseases related to ILBRB activity, such as chronic obstructive pulmonary disease and other inflammatory disease. The sequences are also useful for studying the effect of variation on the confidence drugs targeting ILBRB sequences AAS95525-AAS95579 represent confidence to detect ILBRB gene polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ASO primer #2, used to detect human ADRB3 gene polymorphisms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
0.5%; Score 11; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 8.1e+02;
Matches 11; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 3 A; 8 C; 1 G; 2 T; 0 U; 1 Other;
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Gaps

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WO200208425-A2

Human, interleukin 8 receptor beta, IL8RB; ss; antiinflammatory, probe, haplotyping; haplotype pair, single nuclectide polymorphism; genotyping; gene therapy; drug screening; chronic obstructive pulmonary disease; inflammatory disease; sequencing primer; PCR primer.

Homo sapiens

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The present invention relates to a new polypeptide comprising a sequence which is a polymorphic variant of a reference sequence for ADRB3 (Deta-3-denemental receptor) protein. The reference sequence comprises a sequence of 408 amino acids as given in the specification, or its fragment, and the of 408 amino acids as given in the specification, or its fragment, and of 408 amino acids and comprises one or more variant amino acids. The polymorphic variant comprises one or more variant amino acids. The polymorphic variants are useful in studying the expression and function of ADRB3, in expression and function of ADRB3 to treat diseases related to ADRB3 activity, in studying the effect of the variation on the biological activity of ADRB3, and the binding affinity of candidate drugs targeting ADRB3 for the treatment of disorders and an early onset of non-insulin-dependent diabetes mellitus. Haplotyping methods are useful in validating ADRB3 as a candidate target for treating a specific condition or disease predicted to be associated with ADRB3 activity, or in the design of clinical trials of candidate drugs for treating a specific condition or disease associated with ADRB3 activity. The present nucleic acid sequence represents one of a collection of allele-specific oligonucleotide (ASO) primers (ABR11465- ABR11488) that were used in the methods of the invention to detect polymorphisms in the human ADRB3 gene
                                                                                                                                                                                                                                                                                                                                Novel genetic variants of beta-3-adrenergic receptor gene useful in studying expression and function of the protein, and for screening drugs to treat diseases e.g. obesity, non-insulin dependent diabetes mellitus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 17; Page 14; 91pp; English
                                                                                                                                                                            (GENA-) GENAISSANCE PHARM INC.
                                                                        23-JUL-2001; 2001WO-US023223
                                                                                                                             21-JUL-2000; 2000US-0220088P
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                                                                                                                                                                                                                                 Koshy B;
                         31-JAN-2002
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Gaps
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Query Match 0.5%; Score 11; DB 1; Length 15; Best Local Similarity 84.6%; Pred. No. 8.1e+02; Matches 11; Conservative 1; Mismatches 1; Indels
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1252 CCCATCCCCAACC 1264 2 CCCATCCCCACCY 14 à

AAS94602 standard; DNA; 15 BP. 14-FEB-2002 AAS94602; RESULT 1453 AAS94602,

Human PLTP gene allele-specific oligonucleotide sequencing primer #11 (first entry)

Human; phospholipid transfer protein; PLTP; haplotyping; haplotype pair; single nucleotide polymorphism; genotyping; gene therapy; drug screening; binding affinity; atherosclerosis; ss; sequencing primer; PCR primer; probe.

Homo sapiens

WO200172966-A2

04-OCT-2001.

26-MAR-2001; 2001WO-US009776.

24-MAR-2000; 2000US-0192127P.

(GENA-) GENAISSANCE PHARM INC.

Choi JY, Chew A,

WPI; 2002-010724/01

New isolated polynucleotide which is polymorphic variant of phospholipid transfer protein (PLTP) gene, having any one of polymorphic sites PS1-PS25, for studying function of PLTP, and expressing PLTP protein.

Claim 15; Page 73; 99pp; English

The invention relates to single nucleotide polymorphisms in the gene encoding the human phospholipid transfer protein (PLTP). A method for encoding the pirp gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene in an individual comprises identifying the copies of the gene in a defined by a haplotype of in the specification or whether both copies are defined by a haplotype pair copair. This method is useful in genotyping, whereby all possible haplotype to pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair of the haplotype or haplotype pair of the haplotype or haplotype pair of the haplotype or haplotype pair in a reference population, where a higher haplotype or haplotype pair in the trait population indicates the trait is associated with the thaplotype or haplotype pair. PLTP and its corresponding DNA are used for studying the expression and function of PLTP, for use in screening of or studying the expression and function of PLTP, for use in screening of or studying the expression and function of PLTP activity. The sequences are also useful for studying the effect of variation on the biological activity of PLTP as well as on the blinding affairinty of candidate drugs targeting PLTP for treating atherosolerosis. Sequences the informating primers and PCR primers used for detecting PLTP gene

Sequence 15 BP; 2 A; 5 C; 5 G; 2 T; 0 U; 1 Other;

Gaps .. 0 Query Match
0.5%; Score 11; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 8.1e+02;
Matches 11; Conservative 1; Mismatches 1; Indels

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ABX01272 standard; RNA; 15 BP. 23-DEC-2002 (first entry) ABX01272; RESULT 1454

Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection; HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide; liver failure; hepatocellular carcinoma; HCV infection; drug therapy; type I interferon; interferon alpha; interferon beta; cytostatic; interferon gamma; consensus interferon; hepatotropic; autiinflammatory; substrate; hammerhead ribozyme; HH ribozyme; ss. Hepatitis C virus substrate #1054 for HCV hammerhead ribozyme #1054.

Hepatitis C virus. US2002082225-A1.

23-MAR-1999; 27-JUN-2002

99US-00274553

Gaps

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(BLAT/)

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Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5 or 3 and semenic flanking regions, 5 and 3 intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
                                                                                     ABQ84043 to ABQ84083 represent specifically claimed DNA probes which can be used in a deoxyribonucleic acid (DNA) chip (i) comprising 12-100 DNA probes fixed to a glass plate, silicon chip, membrane or high-molecular material. (I) is useful for diagnosing tubercle bacillus and its drug tolerance. (I) has a high diagnosing efficiency and accuracy, low cost and short detection time. The present sequence represents an rpoB probe which is used in the exemplification of the present invention
DNA chip for diagnosing tubercle bacillus and its drug tolerance
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                                                                                                                                                                                                                                                                                    Sequence 15 BP; 1 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human C/EBP antisense fragment no.2204.
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Tang L, Shahabuddin S;
                                               Disclosure; Fig 2; 15pp; Chinese.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-APR-2001; 2001US-0286137P
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                                                                                                                                                                                                                                                                                                                                                                              11; Conservative
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                                                                                                                                                                                                                                                                                                                                                        Similarity
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                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S:
Matches 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1456
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                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The cargumetic nucleic acid or ribozyme is in a harmerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV ilbozymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or replication of hepatocellular carcinoma. The HCV ilbozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was contained in electronic format directly from the USPTO web site at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                 New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diagnosis; probe; rpoB; DNA chip; drug tolerance;
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                                                                                                                                                                                            Pavco PA, Macejack D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 11; DB 1; Length 15;
11.8%; Pred. No. 8.1e+02;
ve 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 15 BP; 3 A; 7 C; 2 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seqdata.uspto.gov/psipsDIDEntry.html
                                                                                                                                                                                              Roberts B,
                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 51; 80pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABQ84097 standard; DNA; 15 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-OCT-2000; 2000CN-00133796
       99US-00274553.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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                                                                                                                                                                                              Blatt L, Mcswiggen JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Agucchageue 15
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deoxyribonucleic acid
                                                  BLATT L.
MCSWIGGEN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-644410/70
                                                                                                                                                                                                                                            WPI; 2002-617759/66
                                                                                            (ROBE/) ROBERTS B.
(PAVC/) PAVCO P A.
(MACE/) MACEJACK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RpoB probe M36.
     23-MAR-1999;
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RESULT 1455 ABQ84097/c

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Gaps

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Indels

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Mismatches

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use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject stissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Microarray; probe; Mycobacterium; antibiotic-resistance; genotyping; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mycobacterium antibiotic resistance differentiating probe rpo 531-MW1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Microarray for simultaneously genotyping Mycobacteria species, differentiating Mycobacterium tuberculosis strains and detecting antibiotic-resistant strains, comprises specific probes on a support.
                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                        0.5%; Score 11; DB 1; Length 15; 80.0%; Pred. No. 8.1e+02; ive 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 1 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                       Seguence 15 BP; 0 A; 8 C; 4 G; 2 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Song E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 14; Page 71; 76pp; English.
                                                                                                                                                                                                                                                                                                                                                       1240 CTCGCCTCCGACCCC 1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-OCT-2002; 2002WO-KR001885.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-OCT-2001; 2001KR-00062125.
                                                                                                                                                                                                                                                                                                                                                                                            1 crescribesecece 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC73426 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SJHI-) SJ HIGHTECH CO LTD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Park H, Jang H,
                                                                                                                                                                                                                                                                                             Local Similarity 80.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     resistant strains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mycobacterium sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          402003031654-A1.
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(PARK/) PARK H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-JUL-2003
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                                                                                                                                                                                                                                                                              Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1457
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New nucleoside triphosphate compound for use in inhibiting gene expression and in human therapy, such as, for the treatment of cancer.
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                                                                                                                                                                                                                      Zinzyme; ss; K-ras; human; gene therapy; cytostatic; catalytic RNA; gene expression; cancer; HER-2.
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100.0%; Pred. No. 8.18+02;
tive 0; Mismatches 0; Indels
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                                                                                                                                                                                                 K-ras targeting zinzyme substrate sequence #12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 3; SEQ ID NO 12; 100pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                05-NOV-1997; 97US-0064866P.
29-APR-1998; 98US-0083727P.
04-NOV-1998; 98US-00186675.
28-APR-1999; 99US-00301511.
29-DEC-1999; 99US-0047432.
33-DEC-1999; 99US-00476387.
23-MAX-2000; 2000US-00578223.
04-APR-2001; 2001US-00825805.
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                                                                                                       ADD15803 standard; RNA; 15
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                                                                                                                                                                    (first entry)
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Best Local Similarity 100.
Matches 11; Conservative
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1284 CAGCGCCCACA
                             CAGCGCCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BEIG/) BEIGELMAN L. (ZINN/) ZINNEN S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-801249/75.
                                                                                                                                                                                                                                                                                                                           US2003105308-A1.
                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                      31-JUL-2001;
                                                                                                                                                                    15-JAN-2004
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                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                       ADD15803;
                             15
                                                                             RESULT 1458
                                                                                          ADD15803
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RESULT 1459

0.5%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 8.1e+02;

Query Match Best Local Similarity

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Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel compound useful for treating cirrhosis, liver failure, heparocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                     Nucleic acid molecule, Hepatitis C virus, HCV; Hepatitis B virus, HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid, hammerhead ribozyme; DNAzyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative, disease state, HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lee P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pavco P,
                                                                                                                         HBV enzymatic nucleic acid substrate sequence #89.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 2 A; 6 C; 1 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 214; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mcswiggen J,
                 ACD56200 standard; RNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-2001, 2001US-00817879.
08-JUN-2001, 2001US-028876P.
24-OCT-2001, 2001US-0359599.
05-DEC-2001, 2001US-03370559P.
                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-2002; 2002WO-US009187
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                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
PAUCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Macejak D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-229207/22.
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                                                                                                                                                                                                                                                                                                                     Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LEE P.
DRAPER K.
                                                                                                                                                                                                                                                                                                                                                           WO200281494-A1.
                                                                                       24-SEP-2003
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Draper K,
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                                                     ACD56200;
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(MACE/)
(MOSW/)
(MORR/)
(PAVC/)
(LEEP/)
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 ACD56200
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A new method has been developed of breeding for corn with increased kernel oil concentration. The method comprises: (a) selecting a corn plant from a breeding population using at least one of the genetic compress s1375, s1384, s1394, s1415, s1457, s1480, s1476, s1484, s1545, s1536, s1537, s1480, s1476, s1756, s1757, s18172, s1774, s1813, s1816, s1767, s18172, s1774, s1927, s1937, s1818, s1816, s1937, s1936, s1937, s1931, s1933, cc s1939, s1936, s1936, s1936, s1936, s1937, s1937, s1933, s1936, s
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Corn; kernel oil; concentration; trait controlling loci; genetic marker;
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                                                                                                                                                                                                                                                                                                                                                                                                                         Corn kernel oil concentration controlling loci marker 82097 primer 1.
                                                  Gaps
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0.5%; Score 11; DB 1; Length 15; 63.6%; Pred. No. 8.1e+02; cive 4; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                            BP
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                                                                                                                                                                                                                                                                            AAV72786 standard; DNA; 18
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                                                     Conservative
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CUAUGCCUCAU 11
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                             Best Local Similarity
Matches 7; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zea mays.
                                                                                                                                                                                                                                                                                                                            AAV72786;
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                                                                                                                                                                                                                            RESULT 1460
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Matches
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AAD27475;

RESULT 1461

AAD2747

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exon

exon

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AAZ65654 to AAZ69578 represent human biallelic markers, from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification of primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the defence in the characterisation of the pharmaceutical agents acting on a disease as well as other treatment. The The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and the passon invention a sequence in the Sequence Listing from the present in the Sequence Listing from the constant in the sequence Listing from the sequence in the sequence Listing from the sequence in the sequence Listing from the constant in the sequence Listing from the sequence in the seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                           Human biallelic marker upstream amplification primer SEQ ID NO:7262.
                                                                                                                                                                             Human genome, biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cryptosporidium parvum 860 gene sequencing PCR primer, 815.R11.
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0.5%; Score 11; DB 1; Length 19;
Best Local Similarity 73.7%; Pred. No. 1.4e+03;
Matches 14; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 1 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chumakov I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 9; Page 1779; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   107 TGATCTCTATGCCCGAGTC 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 rerrereasiscerrere 19
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98US-0109732P.
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                                                                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            map of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-013267/01.
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                                                                                                                                                                                                                                                                                                      diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                             WO9954500-A2.
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23-NOV-1998;
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                                                                               10-SEP-2001
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                             AAZ72906;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1463
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a mammalian K+ channel protein with two pore domains, called TREX2 (TWIK-Related K+ Channel). The protein produces currents whose current-voltage relationship is slightly inwardly rectifying in high symmetrical K+ conditions. TREK2 is a member of the fatty acid-activated and mechanosensitive K+ channel family. TREK-2 gene footsed on chromosome 1431 is abundantly expressed in Kidney, pencreas and moderately in testis, brain, colon and small intestine. The mammalian K+ channel protein is useful in methods for screening various compounds. In particular, the protein is useful in methods for identifying biologically active compounds with anaesthetic properties. The present sequence is reverse transcription (RT) PCR primer used for analysing human TREK-2 gene exon-intron-exon DNA sequence used in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New mammalian K+ channel protein with two pore domains, for screening various compounds, particularly for identifying biologically active compounds with anesthetic properties.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                              Human; TWIK-Related K+ Channel-2; TREK-2; anaesthetic; screening; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ó,
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Pred. No. 1.4e+03;
0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.5%; Score 11; DB Best Local Similarity 73.7%; Pred. No. 1.4e Matches 14; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                               Human TREK-2 gene exon-intron 1-exon DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure, Fig 1B; 50pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      873 GGACTCAGGCACCACAGTG 891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 geaccercacrecreagie 19
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                                                                                                               AAD27475 standard; DNA; 19 BP.
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2001US-00892360.
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AAZ72906
ID AAZ72906 standard; DNA; 19
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/*tag= a
3. .17
/*tag= b
/number= 1
18. .19
/*tag= c
                                                                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-139903/18.
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27-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
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Gaps

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S60 antigen; protozoacide; vaccine; intestinal infection; diarrhoea;

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Matches
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                                                                                                                                                                                                                The invention relates to Cryptosporidium parvum S60 potential vaccine antigen and its corresponding DNA molecule. S60 antigens are used in vaccine preparations for immunising animals. preferably human, against Cryptosporidium. The S60 protein is processed into two glycoproteins S15 and S45. This S45 and S15 glycoproteins behave as a single membrane glycoprotein S60. S60 vaccine antigen is used for treating intestinal infections such as diarrhoea in immunosuppressed patients e.g., AIDS forguized Immuno Befliciancy Syndrome), cancer patients and recipients of sequencing Cryptosporidium parvum S60 gene
                                                                                                                                                             nucleic acids encoding antigenic polypeptides of Cryptosporidium in antigenic preparations for immunizing animals against
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA polymerase gene; anti-HBV drug resistance;
                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                    Score 11; DB 1; Length 19;
Pred. No. 1.4e+03;
0; Mismatches 5; Indels
AIDS; Acquired Immune Deficiency Syndrome; cancer; PCR
                                                                                                                                                                                                                                                                                                                  Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                           Gooley AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HBV DNA polymerase gene PCR primer HBPr135B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Van Geyt C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mutation detection; PCR primer; ss.
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                                                                                                                           Williams
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                                                                                                                                                                                                Example; Fig 6; 72pp; English.
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                                                                      01-DEC-2000; 2000WO-AU001492.
                                                                                        99AU-00004400
                                                                                                                                                              Novel nucleic acids encoding
                                                                                                                                                                                                                                                                                                                                     0.5%;
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99US-0143546P
                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF56086 standard; DNA; 20
                                                                                                          (MACQ-) MACQUARIE RES LTD
                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Maertens G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HBV; hepatitis B virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (INNO-) INNOGENETICS NV
                 Cryptosporidium parvum.
                                                                                                                          Slade MB,
                                                                                                                                           WPI; 2001-408274/43.
                                                                                                                                                                                                                                                                                                                                              Local Similarity
es 14; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hepatitis B virus.
                                                                                                                                                                              Cryptosporidium.
                                  WO200140248-A1.
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                                                                                        01-DEC-1999;
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13-JUL-1999;
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                                                     07-JUN-2001
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                                                                                                                                                                                                                                                                                                                                     Query Match
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                                                                                                                                                                                                                                                                                              The present sequence is a primer used in a method for monitoring antihepatitis B virus (HBV) drug resistance in a patient by genetic detection of any one of mutations L528M, M552V/I and/or V/L/M555I in HBV DNA polymerase in a biological sample from the patient. The method is useful in the field of genetic detection of anti-HBV drug resistance during HBV therapy. The method is rapid, reliable and precise
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Making and refolding insoluble or aggregated proteins having free cysteine by exposing host cell expressing protein to cysteine blocking agent, and exposing to cysteine reactive group to increase their effectiveness.
                                                                 Monitoring anti-HBV drug resistance by genetic detection of mutations DNA polymerase of HBV in patient's sample, involves hybridizing the polymucleic acids of the sample with a probe and detecting the hybrid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88;
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tHerapeutic half-life, PCR primer, anti-angiogenesis factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 11; DB 1; Length 20;
Pred. No. 1.6e+03;
0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 12 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        566 AATGCCGAAAGGAAATGGG 584
                                                                                                                                                                                                                            Claim 4; Page 12; 64pp; English.
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WPI; 2001-138370/14.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-NOV-2001.
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883333

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Primer #2 (5'-3618-3639-3', see AAQ32872) was used with minus strand apprimer # (3'-420-4241-5', see AAQ32874) to amplify son 4 of the human apolipoprotein E gene. The epsilon 7 mismatch mutation occurs in this region, at position 4141 and 4144. A set of four oligonucleotide probes was prepared to distinguish the wild type from the mutant base at the mismatch position for both the plus and the minus strands. The probe set AAQ32881-2 and AAQ32889-90 hybridises to nucleotides 4136-4149 of ApoE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            anchored polymerase chain reaction; APCR; apoE; mismatch; epsilon 2; epsilon 4; epsilon 5; epsilon 7; ss.
                                                                                                                                   anchored polymerase chain reaction; APCR; apoE; mismatch; epsilon 2; epsilon 4; epsilon 5; epsilon 7; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Testing apolipoprotein E genotype - using polymerase chain reactor primers and labelled allele-specific oligonucleotide probe for hybridisation to amplified deoxyribonucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%; Score 10.8; DB 1; Length 14; 85.7%; Pred. No. 7.4e+02;
                                                                                                   Human apolipoprotein epsilon 7 minus-strand probe #19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human apolipoprotein epsilon 7 plus-strand probe #11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 14 BP; 4 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. 7.46
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 8; Page 13; 16pp; Japanese.
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 BP.
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 standard; DNA; 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ32881 standard; DNA; 14
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                                                                   (first entry)
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nes 12, Conservative
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                                                                                                                                                                                                                                                                                                                                                                      (NNTR ) NIPPON SHOJI
                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1992-426692/52.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-APR-1991;
                                                                                                                                                                                                                                                                                                 17-APR-1991;
                                                                                                                                                                                                                                                                                                                                    17-APR-1991;
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                                                                     29-APR-1993
                                                                                                                                                                                                                                                               11-NOV-1992.
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                                                                                                                                                                                             Synthetic.
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 AAQ32889
                                     AAQ32889;
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Matches
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therapeutics that are attached or for directing delivery of a specific target within the body. Sequences ABK16774-ABK16852 represent PCR primers used in synthesis of the proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This probe is used to screen a human liver cDNA library for the presence of a clone (pFRTXI) conteg. the codding information for human factor IX. The recombinant DNA clone is useful for detect- ing mutations or other genetic deficiencies concerned with factor IX. It can also be used to diagnose blood clotting deficiencies e.g. haemophilia B. The use of recombinant DNA methods results in the large scale expression of hFIX polypeptides. See also AAQ10577 and AAQ10579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA coding for human factor IC - used for producing polypeptide and detecting genetic modifications in diagnosing blood clotting deficiencies.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Human factor IX; genetic deficiencies; blood clotting disorders;
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                                                                                                                                                                                                                                                                                                                                                                                                        Probe for detecting human factor IX encoding plasmid clone.
                                                                                                     Score 11; DB 1; Length 24;
Pred. No. 1.9e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Indels
                                                                                                                                       0; Indels
                                                                   Sequence 24 BP; 4 A; 8 C; 2 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seguence 14 BP; 2 A; 3 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                  Query Match 0.5%; Score 11; UB
Best Local Similarity 100.0%; Pred. No. 1.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure, Page 7; 12pp; English.
                                                                                                                                                                                                                                                                                                  AAQ10578 standard; DNA; 14 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     85US-00735702.
86US-00888041.
87US-00094031.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          haemophilia B; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-MAY-1985;
18-JUL-1986;
28-AUG-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                        10-MAY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-MAY-1989;
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RESULT 1467 AAQ32889/c

Matches

8 g

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Gaps

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2; Indels

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Sequence 14 BP; 5 A; 2 C; 5 G; 2 T; 0 U; 0 Other;
     correct PN field.)
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                                                                                                                                                             Primer #2 (5'-3618-3639-3', see AAQ32872) was used with minus strand primer #4 (3'-4220-4241-5', see AAQ32874) to amplify exon 4 of the human apolipoprotein E gene. The epsilon 7 mismatch mutation occurs in this region, at position 4141 and 4144. A set of four oligonucleotide probes was prepared to distinguish the wild-type from the mutant base at the mismatch position for both the plus and the minus strands. The probe set AAQ32881-2 and AAQ32889-90 hybridises to nucleotides 4136-4149 of ApoE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The sequence is that of a polynucleotide probe which may be used in the detection of new hypervariable regions (HVR) in a DNA sequence. HVR represent a fingerprint useful in e.g. forensic science, paternity testing, animal breeding, etc. The probe may be used as part of a method for the efficient detection in humans or other animals, without the use of mini-satellites or primary enrichment. (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Detecting the hypervariable regions of DNA for diagnosing hereditary illnesses and tumours - by hybridising labelled polynucleotides and analysing genomic DNA of individuals which react with restriction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HVR; human; animal; forensic science; paternity testing; diagnosis; animal breeding; hereditary diseases; tumours; allele; loss; chromosomal regions; tumour region identification; ss.
                                                               Testing apolipoprotein E genotype - using polymerase chain reactor primers and labelled allele=specific oligonucleotide probe for hybridisation to amplified deoxyribonucleic acid.
                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                   0.5%; Score 10.8; DB 1; Length 14; 85.7%; Pred. No. 7.4e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                 Sequence 14 BP; 1 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hypervariable region detection probe 14C14.
                                                                                                                                Claim 8; Page 12; 16pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example; Page 13; 46pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                  1131 CTTCACCTCCAGCT 1144
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                                                                                                                                                                                                                                                                                                                                                                                                                               CTGCTCCTCCAGCT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                      12; Conservative
(NNTR ) NIPPON SHOJI KK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1993-136548/17.
                                 WPI; 1992-426692/52
                                                                                                                                                                                                                                                                                                                                                 Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-AUG-1991;
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10-AUG-1993
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Matches
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This sequence represents a probe for a wild type HIV reverse
transcriptase (RT) gene fragment. This sequence can be used in the method
cof the invention for determining the susceptibility to antiviral drugs of
viruses which contain RT genes and are present in a biological sample. It
comprises: (1) releasing, isolating or concentrating the polymucleic
acids present in a sample; (2) amplifying the relevant part of the RT
genes present with at least one sultable primer pair; (3) hybridising the
CC genes present with at least one sultable primer pair; (3) hybridising the
CC gapable of simultaneously hybridising to their respective target regions
CC dapable of simultaneously hybridising to their respective target regions
CC dapable of simultaneously hybridising of the irrespective target regions
CC chomologous targets, or with the probes hybridising specifically with a
CC sequence complementary to any of the target sequence at
CC hybrids formed in steep (3); and (4) inferring the nucleotide sequence at
CC the codons of interest (codons 38-44, 47-53, 65-72, 73-77, 148-154, 180-
CC interest and/or antiviral drug resistance spectrum, and possible the type
CC of viral isolates involved from the differential hybridisation signals
CC obtained in step (4). The method is specifically used to detect antiviral
CC drug resistant strains of viruses containing RT genes, especially HIV
C retroviruses and Hepadnaviridae. The method can also be used for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Determining susceptibility to antiviral drugs of reverse transcriptase containing viruses - useful for genotyping HIV RT and detecting antiviral resistant HIV.
                                                                                                                                                                                                                                                                                                                                                                         Reverse transcriptase gene; HIV; RT gene; antiviral drug susceptibility; virus susceptibility; antiviral drug resistant viral strain; retrovirus; Hepadnaviridae; HIV RT genotyping; probe; ss.
                                       Gaps
                                       ;
0
    Length 14;
                                       2; Indels
                                                                                                                                                                                                                                                                                                                                    Probe 215m50 for drug induced HIV RT gene G213L214T215.
Query Match
0.5%; Score 10.8; DB 1;
Best Local Similarity 85.7%; Pred. No. 7.4e+02;
Matches 12; Conservative 0; Mismatches 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stuyver L, Louwagie J, Rossau
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immunodeficiency virus 1.
                                                                                                                                                                                                                   BP.
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                                                                               CTGAAAAAGAGGGG 1026
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                                                                                                            1 CTGAAACGATGGG 14
                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                23-MAR-1998
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25-JUN-1996;
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schultz451-1.rng

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Sequence 14 BP; 5 A; 5 C; 1 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                              RESULT 1472
AAT79144/C
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This sequence represents a probe for a wild type HIV reverse transcriptase (RT) gene fragment. This sequence can be used in the method transcriptase (RT) gene fragment. This sequence can be used in the method of the invention for determining the susceptibility to activitial drugs of viruses which contain RT genes and are present in a biological sample. It comprises: (1) releasing, isolating or concentrating the polymucleic acids present in a sample; (2) amplifying the relevant part of the RT genes present with at least one suitable primer pair; (3) hybridising the comprises being applied to known locations on a solid support, and are the probes being applied to known locations on a solid support, and are capable of simultaneously hybridising to their respective traspet regions under appropriate hybridisation and wash condition allowing the detection of homologous targets, or with the probes hybridising specifically with a sequence complementary to any of the traget sequence at the codons of interest (codons 38-44, 47-53, 65-72, 73-77, 148-154, 180-187, 122-216, and 217-220), and (4) inferring the nucleotide sequence at the codons of interest and/or the amino acids of the codons of interest and/or antiviral drug resistance spectrum, and possible the type of viral isolates involved from the differential hybridisation signals obtained in step (4). The method is specifically used to detect antiviral drug resistant strains of viruses containing RT genes, especially HIV retroviruses and Hepadnaviridae. The method can also be used for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Determining susceptibility to antiviral drugs of reverse transcriptase containing viruses - useful for genotyping HIV RT and detecting antiviral
                                                                                                                                                                                                                                                                                                                             Reverse transcriptase gene, HIV, RT gene, antiviral drug susceptibility, virus susceptibility, antiviral drug resistant viral strain; retrovirus; Hepadnaviridae, HIV RT genotyping; probe; ss.
                                                                          Gaps
                                                                          .
0
                                          Length 14;
                                         ch 0.5%; Score 10.8; DB 1; Length 1-
1 Similarity 85.7%; Pred. No. 7.4e+02;
12; Conservative 0; Mismatches 2; Indels
               Sequence 14 BP; 3 A; 4 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                               Probe 215w22 for wild type HIV RT gene T215.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      laim 13; Page 38; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                      Human immunodeficiency virus 1.
                                                                                                                                                                                                         AAT98980 standard; DNA; 14 BP.
                                                                                                     1212 GGGGCTGACCCCA 1225
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                                                                                                                                  1 GGGGCTTACCACA 14
                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (INNO-) INNOGENETICS NV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stuyver L, Louwagie J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1997-393716/36.
                                            Query Match
Best Local Similarity
Matches 12; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .7-JAN-1997;
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                                                                                                                                                                                                                                                                    23-MAR-1998
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                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                       AAT98980;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein, i.e. hVEGF cDNA, to obtain hybridishing anticedus the target oligomucleotides, which preferably prevent the expression of the target protein, and optionally lysing the hybridisation site with a nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; vascular endothelial growth factor; VEGF; antisense; preparation; oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Method for preparing an anti-sense nucleic acid - useful for preventing expression of a target gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is an oligonuclectide antisense to human vascular endothelial growth factor (hVEGF) cDNA. It was prepared by hybridising several random nuclectide sequences to DNA or RNA encoding a target procein, i.e. hVEGF cDNA, to obtain hybridising antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                          Gaps
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                        Length 14;
                                                                          2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 14 BP; 2 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
                        Score 10.8; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human VEGF cDNA antisense oligonucleotide A089N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example; Page 17; 25pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TOAG ) TOA GOSEI CHEM IND LTD
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                                                                                                                             793 GTCTCCTGTAGTAA 806
                                                                                                                                                                                                                                                                                                         AAT79144 standard; DNA; 14
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Ouery Match
Best Local Similarity 85...
Best Local 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUL-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                          which specifically cleave RNA derived from an epidermal growth factor receptor (GGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99000 represent specifically claimed target sequence from human EGF-R. AAV98044 to AAV98066 and AAV98067 to V9878 represent hammerhead ribozymes and harbin ribozymes respectively for human EGF-R. The NAMs are useful for cleaving EGF-R RNA in the treatment of a condition associated with EGFR expression levels e.g. to inhibit cell proliferation in the prevention or transment of cancers. The NAMs can also be used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of EGF-R RNA in a cell
                                                                                                                                                                                                                                                                                                       Enzymatic nucleic acids - which cleave RNA derived from an epidermal growth factor receptor, useful for inhibiting cell proliferation and for
                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes enzymatic nucleic acid molecules (NAMs)
hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ErbB-2; antisense oligonucleotide; modulate; gene expression; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.5%; Score 10.8; DB 1; Length 14; 78.6%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ErbB-2 gene antisense oligonucleotide ErbB-2-N-83.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 14 BP; 2 A; 8 C; 3 G; 0 T; 1 U; 0 Other;
              cancer; genetic drift; defection; mutation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Mismatches
                                                                                                                                                                                                                                                 Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                   Claim 6; Page 89; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV48874 standard; DNA; 14 BP.
                                                                                                                               98WO-US000730
                                                                                                                                                           97US-0036476P
                                                                                                                                                                         97US-00985162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1232 CGACAGCCCTCGCC 1245
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    78.6%;
                                                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC. (UYAS-) UNIV ASTON.
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Best Local Similarity 78.67
Matches 11, Conservative
                                                                                                                                                                                                                                                                             WPI; 1998-437449/37.
                                                                                                                                                                                                                                                 Fell P,
                                                                                                                                                                                                                                                                                                                                       treating cancers.
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                                           Homo sapiens.
                                                                                                                               14-JAN-1998;
                                                                                                                                                           31-JAN-1997;
                                                                                                                                                                         04-DEC-1997;
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                                                                      WO9833893-A2
                                                                                                  06-AUG-1998
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                                                                                                                                                                                                                                               Akhtar S,
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AAV48709-886 represent antisense oligonucleotides directed against the ExbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in Significant redeution in ExbB-2 protein expression, while cigiqual coligonucleotides AAV48792-886 had little effect. The oligonucleotides CC oligonucleotides AAV48792-886 had little effect. The oligonucleotides CC exemplify the invention. The specification describes oligonucleotides that consecutive contain 8-30 mucleotides able to form three H-bonds each to four consecutive mucleotides able to form three H-bonds each to four consecutive cursecutive cytosines; and the ratio between residues able to form two H-bonds each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The coligonucleotides are used to modulate expression of genes, particularly the genes for p53, Erb-2, juns, junb, TGF-beta 1 or beta 2 to control proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteoblasts, osteoblasts and/or keratinocytes). The chigonucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases consecuting TGF) for stimulating the immune system
                                                                                                                      Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive guanosine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; harmerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antidiamatory; antiarthritic; antipsoriatic; ARNT; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Rippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
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Pred. No. 7.4e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 14 BP; 1 A; 2 C; 1 G; 10 T; 0 U; 0 Other;
(BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human TIE-2 target site SEQ ID NO:2420.
                                                                                                                                                                                                                                                  Example 4; Fig 6d; 286pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                        Brysch W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US006507.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 85.7 nes 12; Conservative
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                                                                                WPI; 1998-400910/35
                                          Schlingensiepen K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-MAR-1999;
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                                                                                                                                                                                                            culture.
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capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method comprises: (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a substrate binding domain (SBD), comprising a random sequence, and a catalytic domain (CD); and (b) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with end catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to cleave target nucleic acid, particularly for treating systemic diseases cleave target nucleic acid, particularly for treating systemic diseases caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic acid, particularly for med to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or generally any condition associated with the level of c-raf. Introduction cell sugar/phosphate modifications increases stability against nuclease and activity. ANY90922 to AAV93877 repersent NACs that can be used in the method, specifically for modulating the expression of a Raf gene
Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seguence 14 BP; 0 A; 3 C; 5 G; 0 T; 6 U; 0 Other;
                                               Coeshott C,
                                                                                                                                   Claim 56; Page 138; 305pp; English.
                                               Jarvis T,
98US-0079678P.
                       (RIBO-) RIBOZYME PHARM INC.
                                                                      WPI; 1999-591315/50
27-MAR-1998;
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Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, referenceis, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.

Claim 179; Page 163; 259pp; English.

Bellon L; Burgin A;

Matulic-Adamic J, Reynolds M, Kisich K, Beigelman L, Mcswiggen JA, Karpeisky A, J, Workman CT, Beaudry A, Sweedler D,

Jarvis T, Ma Parry T, Bei Thompson J,

WPI; 1999-009494/01.

97US-0049002P. 97US-0051718P. 97US-0056808P. 97US-0061321P. 97US-0061324P.

97US-0064866P

05-NOV-1997; 02-0CT-1997 02-0CT-1997 03-JUL-1997 22-AUG-1997

(RIBO-) RIBOZYME PHARM INC.

.; 0 Score 10.8; DB 1; Length 14; Pred. No. 7.4e+02; 5; Mismatches 2; Indels Query Match
Best Local Similarity 50.0%; 889 GIGCIGITGCCCT 902 |:||:||:| 1 Guecuguugeccuu 14 g ò

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Gaps

Human, c-raf, A-raf, B-raf, hammerhead ribozyme; hairpin ribozyme; target, substrate; catalyst, modulation; expression; Raf gene, delivery; screening; identification; synthesis; deprotection; purification; cancer; inflammation, psoriasis; non-hepatic ascites; infection; genetic drift; restenosis; rheumatoid arthritis; ss. Human A-raf target sequence nucleotide position 156. AAV92766 standard; RNA; 14 BP (first entry) 18-FEB-1999 AAV92766; RESULT 1476 Ношо AAV92766

Human, c-raf, A-raf, B-raf, hammerhead ribozyme, hairpin ribozyme, target, substrate, catalyst, modulation, expression, Raf gene; delivery; screening; identification, synthesis, deprotection, purification, cancer, inflammation, psoriasis, non-hepatic ascites, infection, genetic drift; restenosis, rheumatoid arthritis, se. Gaps ò Query Match 0.5%; Score 10.8; DB 1; Length 14; Best Local Similarity 78.6%; Pred. No. 7.46+02; Matches 1; Conservative 1; Mismatches 2; Indels Human C-raf target sequence nucleotide position 205. Sequence 14 BP; 2 A; 9 C; 2 G; 0 T; 1 U; 0 Other; AAV92005 standard; RNA; 14 BP. 1119 GCCCAGTTCCACCT 1132 1 geceagececaceu 14 (first entry) sapiens 18-FEB-1999 AAV92005; RESULT 1477 Homo AAV92005

ઠે 셤 98WO-US009249.

05-MAY-1998;

409850530-A2

12-NOV-1998.

92US-00968436.

93US-00173489

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Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Col 25-26; 169pp; English.
                                                                                                                                                                                                                                                            (PROF-) PROFILE DIAGNOSTIC SCI INC.
                                                     Haemophilus influenzae
                                                                                                                                                                                                                                                                                                   Hepburn AG, Wang C;
  oncogene; virus; ss.
                                                                                                                                                                                                                                                                                                                                       WPI; 1999-130384/11.
                                                                                                                                                                               22-DEC-1993;
                                                                                                                                                                                                                    29-OCT-1992;
                                                                                                US5861244-A
                                        Synthetic
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method comprises: (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a substrate binding domain (BBD), comprising a random sequence, and a catalytic domain (CD); and (b) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with endonucleas activity and catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to cleave target nucleic acid, particularly for treating systemic diseases caused by specific RNA, eg. cancer, inflammation, psoriasis, non-hepatic ascites and infection. They may also be used to detect genetic drift and mutching in diseased cells and to determine craft RNA. Specifically NACs with RNA-cleaving activity that modulate expression of the Raf gene, are used to treat cancer, restencsis, psoriasis or rheumatoid arthritis, or generally any condition associated with the level of c-raf. Introduction of sugar/phosphate modulations increases stability against nuclease and activity. AAV90922 to AAV909377 represent NACs that can be used in the cativity. AAV90922 to Racking the expression of a Raf gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Triplex formation; DNA detection; triple helix; identification; bacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, restenceis, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Triple helix third strand of 23S rRNA gene nucleotides 471-484.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .,
                                                                                                                                                                                                                                                                                                                                                               Bellon L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.5%; Score 10.8; DB 1; Length 14; 64.3%; Pred. No. 7.4e+02; ive 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                           Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K,
Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, I
Thompson J, Workman CT, Beaudry A, Sweedler D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seguence 14 BP; 2 A; 6 C; 2 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 151; Page 155; 259pp; English
                                                                                                                                  97US-0046059P.
97US-0049002P.
97US-0051718P.
97US-00561321P.
97US-0061324P.
97US-0061324P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1137 CTCCAGCTCCACCT 1150
                                                                                                98WO-US009249
                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
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1 CUCCAGCUGCAUCU 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-MAR-1999 (first entry)
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Best Local Similarity 64...
Best Local 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-009494/01.
                                                                                                                                                                                                                                       02-OCT-1997;
05-NOV-1997;
19-DEC-1997;
                   WO9850530-A2
                                                                                                05-MAY-1998;
                                                                                                                                    09-MAY-1997;
                                                                                                                                                                                              22-AUG-1997;
                                                       12-NOV-1998
                                                                                                                                                                             03-JUL-1997
                                                                                                                                                                                                                        02-OCT-1997
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The present sequence represents a polymuclectide that is able to form a triple helix with a double stranded sequence. Cytosine bases in the present can be replaced with 5-methylcytosine for increased triplex tability. The present sequence is used in the assay of the invention, where it can be part of the anchor DNA or reporter DNA sequence. The assay comprises adding a sample containing double-stranded DNA test sequences to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA, where either a part of the anchor DNA test sequence. Triples form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA genes for ribosomal RNA) in clinical samples, but also detecting concepenes and Hepatitis B virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bnzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
autoimmune disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Substrate for hairpin ribozyme which cleaves HCV at nt. 960.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

0.5%; Score 10.8; DB 1; Length 14;
Best Local Similarity 85.7%; Pred. No. 7.4e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 14 BP; 0 A; 7 C; 1 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1015 GAAAAAGAGGGGA 1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ64702 standard; RNA; 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14 GAAGAAGAGGCGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9955847-A2.
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enzymatic nucleic acid, especially a hairpin ribozyme, which cleaves the Hepatitist C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to larget these sites and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and hepatocellular carcinoma. The ribozymes may be used in combination with difference of the complication, other infectious diseases, autoimmune
                                                                                                                                                                                                                                                                    Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.
                                                                                                                                                                                                                                                                                                                                                                              The present sequence represents the preferred target sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 14 BP; 3 A; 5 C; 2 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                          Roberts E,
                                                                                                                                                                                                                                                                                                                                       Claim 2; Page 94; 123pp; English.
                                        98US-0083217P.
98US-0100842P.
                                                                                99US-00257608
99WO-US009027
                                                                                                                                               (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                          Blatt L, Mcswiggen JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diseases, and cancer
                                                                                                                                                                                                                                WPI; 2000-062023/05.
                                                                                   25-FEB-1999;
23-MAR-1999;
26-APR-1999;
                                          27-APR-1998;
                                                              18-SEP-1998;
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Pavco PA,

Score 10.8; DB 1; Length 14; Pred. No. 7.4e+02; 2; Indels Mismatches 3 0.5%; Conservative Local Similarity es 9; Conservat Query Match Matches

1161 TGACTGTCCGAACT 1174 1 ucacuccaacu 14 Д ઠે

AAA26114 standard; DNA; 14 (first entry) 19-JUL-2000 AAA26114; RESULT 1480 AAA2611

BP

Destrogen receptor hairpin ribozyme target sequence SEQ ID NO:2612

Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; harmerhead ribozyme; hairpin ribozyme; antisense oligonuclectide; gene expression modification; cancer; phosphorothioate; endonuclease; anticancer; breast cancer; endometrium cancer; ss

Homo sapiens

WO9954459-A2

28-OCT-1999

99WO-US008547. 98US-0082404P. 19-APR-1999; 20-APR-1998; 23-JUN-1998;

(RIBO-) RIBOZYME PHARM INC

uncleic acid (A') that modulates expression of the oestrogen receptor concline, are used to treat cancer (particularly of breast or endometrium), in vivo or by transforming cells ex vivo and implanting treated cells, or on vivo or by transforming cells ex vivo and implanting treated cells, or in vivo or by transforming cells ex vivo and implanting treated cells, or or other conditions associated with levels of cestrogen receptor.

CC for other conditions associated with levels of cestrogen receptor.

CC Secause of the high selectivity for targeted MNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, correlate inhibition of gene expression with alterations in phenotype, correlate inhibition of gene expression with alterations in phenotype, correlate inhibition of gene expression with alterations in phenotype, correlate inhibition of gene expression with alterations in phenotype, corresponding to modifications in (A) improves used with DNA). The combination of modifications in (A) improves the sequences, and AAA2593 represent their corresponding target sequences, and AAA2592 represent their corresponding target sequences, and AAA2610 to AAA2621 to AAA2621 to AAA2621 to AAA2621 to Expresent other ribozyme sequences and continued and continu New nucleic acids that interact, and optionally cleave, target sequences, The present invention describes nucleic acids (A) that interact stably least one phosphoro(di)thioate Bellon L; Karpeisky A, Haeberli P; Mcswiggen JA, is T, Woolf T, with a target sequence and contain at Claim 79; Page 98; 148pp; English. Beigelman L, Mcswig Zwick M, Jarvis T, used to treat cancer. WPI; 2000-013248/01 Thompson JD, Beig Reynolds M, Zwick Matulic-Adamic J;

Sequence 14 BP; 3 A; 6 C; 3 G; 2 T; 0 U; 0 Other;

Gaps . 0.5%; Score 10.8; DB 1; Length 14; larity 85.7%; Pred. No. 7.4e+02; Conservative 0; Mismatches 2; Indels Local Similarity es 12, Conserv Query Match Best Loca Matches

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Gaps

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RESULT 1481 AAA26158

BP. AAA26158 standard; DNA; 14

AAA26158;

(first entry) 19-JUL-2000

Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; hammerhead ribozyme; hairpin ribozyme; antiesnse oligonucleotide; gene expression modification; cancer; phosphorothioate; endonuclease; anticancer; breast cancer; endometrium cancer; ss Oestrogen receptor hairpin ribozyme target sequence SEQ ID NO:2656.

Homo sapiens.

W09954459-A2

28-OCT-1999

99WO-US008547. .9-APR-1999;

98US-0082404P. 98US-00103636. 20-APR-1998; 23-JUN-1998;

(RIBO-) RIBOZYME PHARM INC.

Bellon L; Karpeisky A, Haeberli P; Beigelman L, Mcswiggen JA, Zwick M, Jarvis T, Woolf T, Thompson JD, Reynolds M, WPI; 2001-607700/69.

Matulic-Adamic J;

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with a target sequence and contain at least one phosphoroidilythicate
link, having endonuclease activity. (A), and more generally any catalytic
nucleic acid (A) that modulates expression of the cestrogen receptor
gene, are used to treat cancer (particularly of breast or endometrium),
in vivo or by transforming cells ax vivo and implanting treated cells, or
for other conditions associated with levels of cestrogen receptor.
Because of the high selectivity for targeted RNA, (A) can also be used to
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
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correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression of modifications in (A) improves
correlate inhibition of same way that restriction endomucleases are
corresponded to AAA22692 represent their corresponding target
correlate inhibition of AAA26212 represent their corresponding target
correlate inhibition of AAA26212 represent their corresponding target
antisense oligonucleotides used in the exemplification of the present
                                                                              New nucleic acids that interact, and optionally cleave, target sequences, used to treat cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Infection; antisense RNA; ribozyme; DNAzyme; antiviral; gene therapy; papilloma virus; hepatitis. B virus; cytotoxic; cytostatic; wart; cervical dysplasia; cervical carcinoma; carcinoma; laryngeal papilloma;
                                                                                                                                                                                                 present invention describes nucleic acids (A) that interact stably
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Schofield D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 14 BP; 1 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PTEN targeted ribozyme flanking sequence sRz-774.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 10.8; DB 1; Local Similarity 85.7%; Pred. No. 7.4e+02; les 12; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Norris JS, Clawson GA, Westwater C,
Hoel B, Dolan J, Pan W;
                                                                                                                                                        Claim 79; Page 100; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABA02602 standard; DNA; 14 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-APR-2001; 2001WO-US012130.
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07-DEC-2000; 2000US-0251810P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UYSC-) UNIV SOUTH CAROLINA.
(PENN-) PENN STATE RES FOUND.
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                                             WPI; 2000-013248/01.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1482
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Length 14;

Schmidt MG;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention comprises four transcription controlling factor (E2F) detection oligonucleotides of the
           Novel nucleic acid for the treatment of papilloma or hepatitis virus induced conditions comprises a catalytic region which produces a cytotoxic or cytostatic effect in the infected cell.
                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                            0.5%; Score 10.8; DB 1; Length 14;
85.7%; Pred. No. 7.4e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                              Sequence 14 BP; 4 A; 4 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                 Example, Page 97; 143pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 6; 8pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                               AAL42722 standard; DNA; 14 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SUME ) SUMITOMO ELECTRIC IND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-AUG-2000; 2000JP-00255579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000JP-00255579.
                                                                                                                                                                                                                                                                                                  997 TGTGGGAAATCGAC 1010
                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 85.74
Best Local 2: Conservative
                                                                                                                                                                                                                                                                                                                   14 TGTGGGAACTCTAC 1
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                                                                                                                                                                                                                               the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JP2002065264-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               An oligo DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                 AAL42722;
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Length 14;

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This invention relates to oligonucleotides used for cleaving, detecting and amplifying the mecA gene (associated with methicillin resistance in Staphylococcus aureus) or its derived RNA. The invention also comprises a detection method employing an RNA amplification process, using RNA certification process in the presence of a complementary oligonucleotide probabelled with an intercalated fluorescent dye, where complementary binding of the probe to the RNA transcription product results in a change of the probe to the RNA transcription product results in a change of the probe to the RNA transcription product results in a change of the probe to the RNA transcription product results in a change of the probes, for the relative to that of a situation where a complex formation is absent, and then measuring the fluorescence complex for detection and then measuring the fluorescence of intensity of the reaction solution. The oligonucleotides may be used as primers or probes, for detecting methicillin-resistant S. aureus in clinical samples. They may also be used therapeutically to inhibit RNA reverse transcription or translation. These oligonucleotides permit rapid and very sensitive detection/identification of the mecA gene, at a call very sensitive detection/identification of the mecA gene, at a call very sensitive detection/identification of the mecA gene, at a call very sensitive detection/identification of the mecA gene, at a call very sensitive detection/identification of the mecA gene, at a call very sensitive detection/identification of the mecA gene, at a call very sensitive detection/identification of the mecA gene, at a call very sensitive detection/identification of the mecA gene, at a call very sensitive detection/identification of the metA denaturation of target RNA. The present sequence represents a methicillin resistant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New oligonucleotide specific for the mecA methicillin-resistance gene, useful for cleavage, detection and amplification of the gene or related
invention are useful for determining the expressed amount of E2F or the transcription activity of E2F. The present sequence represents an E2F detection oligonuclectide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Methicillin resistant Staphylococcus Aureus; MRSA; primer; ss; mecA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Methicillin resistant Staphylococcus aureus detection primer #17.
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0
                                                                                                                                                  Length 14;
                                                                                                                                                                                                    2; Indels
                                                                                                   Sequence 14 BP; 1 A; 8 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                Query Match

0.5%; Score 10.8; DB 1;
Best Local Similarity 85.7%; Pred. No. 7.4e+02;
Matches 12; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 18; 28pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                ABK85917 standard; DNA; 14 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-MAY-2000; 2000JP-00163149.
09-JUN-2000; 2000JP-00179394.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-MAY-2001; 2001EP-00112100.
                                                                                                                                                                                                                                                      1188 CAGAGAGGTGGCAC 1201
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Staphylococcus aureus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-396248/43.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EP1160333-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-AUG-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABK85917;
                                                                                                                                                                                                                                                                                                                                                                               RESULT 1484
ABK85917
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and amplifying the mech gene (associated with methicillin resistance in staphylococcus aureus) or its derived MNA. The invention also comprises a detection method employing an RNA amplification process, using RNA detection method for method process, using RNA methicillin-resistance in derived from the mech gene as template. Also disclosed is a detection method for a methicillin-resistant S. aureus (MRSA), comprising an RNA method for a methicillin-resistant S. aureus (MRSA), comprising an RNA method for a methicillin-resistant S. aureus (MRSA), comprising an RNA complex labelled with an intercalated fluorescent dye, where complementary binding of the probe to the RNA transcription product results in a change of the probes to the PRNA transcription product results in a change in the fluorescent property relative to that of a situation where a complex formation is absent, and then measuring the fluorescence intensity of the reaction solution. The oligonucleotides may be used as primers or probes, for detecting methicillin-resistants S. aureus in creverse transcription or translation. These oligonucleotides permit rapid and very sensitive detection/identification of the measuration of the measuration of transcription or translation. These oligonucleotides permit rapid and very sensitive detection/identification of the measuration of transcription or translation. These oligonucleotides permit rapid rarget RNA. The present sequence represents a methicillin resistant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New oligonuclectide specific for the mecA methicillin-resistance gene, useful for cleavage, detection and amplification of the gene or related
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                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                               Methicillin resistant Staphylococcus Aureus; MRSA; primer; ss; mecA;
                                                                                                                                                                                                                                                                                                                                                       Methicillin resistant Staphylococcus aureus detection primer #19.
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85.7%; Pred. No. 7.4e+02;
tive 0; Mismatches 2; Indels
Score 10.8; DB 1; Length 1 Pred. No. 7.4e+02; 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 5, Page 19, 28pp; English.
                                                                                                                                                                                                                                     BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-MAY-2000; 2000JP-00163149.
09-JUN-2000; 2000JP-00179394.
      Query Match 0.5%;
Best Local Similarity 85.7%;
Matches 12; Conservative
                                                                                       831 GAAGTIGIGCCIAC 844
                                                                                                                                                                                                                                     ABK85919 standard; DNA; 14
                                                                                                                             daadgrdrdcrrac 14
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Best Local Similarity 85.73
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Staphylococcus aureus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Taya T, Ishiguro T,
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                                                                                                                                                                                               RESULT 1485
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831 GAAGTIGIGCCIAC 844

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Sequence 14 BP; 3 A; 2 C; 5 G; 4 T; 0 U; 0 Other;

BP.

ABZ34640 standard; DNA; 14

(first entry)

31-JAN-2003

ABZ34640;

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Human immunodeficiency virus; HIV; reverse transcriptase; RT; enzyme;
detection; mutation; anti-HIV drug resistance; polymorphism; resistance;
                                                                               HIV-1 reverse transcriptase mutation detection probe SEQ ID NO:462.
                                                                                                                                                                                                                                                                                                          Claim 2; Page 29; 117pp; English.
                                                                                                                          Human immunodeficiency virus 1.
                                   ВЪ.
                                                                                                                                                                                            11-JAN-2001; 2001EP-00870005.
20-APR-2001; 2001EP-00870085.
24-APR-2001; 2001US-0286102P.
                                                                                                                                                                              09-JAN-2002; 2002WO-EP000153
                                   ABZ34220 standard; DNA; 14
                                                                (first entry)
                                                                                                                                                                                                                         (INNO-) INNOGENETICS NV.
GAAGGTGTGCTTAC
                                                                                                                                                                                                                                        De Smet K, Stuyver L;
                                                                                                                                                                                                                                                       WPI; 2002-590680/63.
                                                                                                                                                 WO200255741-A2.
                                                                31-JAN-2003
                                                                                                                                                               18-JUL-2002
                                                                                                                                   Synthetic.
                                                                                                            probe; ss.
                                                  ABZ34220;
                      RESULT 1486
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The present invention describes a method for detecting mutations associated with anti-HIV drug resistance in a patient by detecting at least cone of the mutations K103N/R, V106A/IL, V181C/I, M184V/I, V186E, C190A/S/R, T215Y/F/D/S/A and/or O151M/L in the reverse transcriptase (RT) of 190A/S/R, T215Y/F/D/S/A and/or O151M/L in the reverse transcriptase (RT) of HIV strains in a biological sample using a specific set of probes of the formal set of method and the nucleic acid sequences used in the method are useful for determining viral mutations and/or polymorphisms in the HIV RT gene associated with resistance. The probes are useful for the genetic detection, preferably in virco detection of the mutations K103N/R, V106A/J/L, Y181C/I, O151M/L, M184V/I, Y188L, G190A/S/R and/or C715Y/F/D/S/A in the RT of HIV strains in a biological sample, where the mutation is associated with anti-HIV drug resistance. The method provides a rapid, reliable and precise assay or determination and monitoring of antiviral drug resistance or mutation is associated with anti-HIV drug resistance of antiviral drug resistance or mutations associated with drug resistance of sequences and probes which are used in the exemplification of the present invention. Detecting mutations associated with anti-HIV drug resistance comprises detecting at least one of the mutations in the HIV reverse transcriptase gene by using probes optimized to function together in a reverse-hybridization assay.

Sequence 14 BP; 3 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

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Gaps
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0
0.5%; Score 10.8; DB 1; Length 14;
85.7%; Pred. No. 7.4e+02;
tive 0; Mismatches 2; Indels
                                  12; Conservative
                   Similarity
    Query Match
Best Local S
                                  Matches
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1212 GGGGCTGACCCCA 1225 GGGGGCTTACCACA 14

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The present invention describes a method for detecting mutations associated with anti-HIV drug resistance in a patient by detecting at associated with anti-HIV drug resistance in a patient by detecting at least one of the mutations KlOSN/R, VIOSA/IV, VISIC/I, MIS4V/I, VISEL, CG190A/S/R, T21SY/F/D/S/A and/or CILSM/L in the reverse transcriptase (RT) of HIV strains in a biological sample using a specific set of probes coptimised to function rogether in a reverse-hybridisation assay. The competence and the nucleic acid sequences used in the method are useful for determining viral mutations and/or polymorphisms in the HIV RT gene cascolated with resistance. The probes are useful for the genetic detection, preferably in vitro detection of the mutations K103N/R, CC 7215Y/F/D/S/A in the RT of HIV strains in a biological sample, where the mutation is associated with anti-HIV drug resistance. The method provides a rapid, reliable and precise assay or determination and monitoring of a rapid, reliable and precise assay or determination and monitoring of a rapid, reliable and precise assay or determination and monitoring of a rapid, reliable and precise assay or determination and monitoring of viruses containing RT genes . RAZ34642 represent HIV RT sequence and probes which are used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Detecting mutations associated with anti-HIV drug resistance comprises detecting at least one of the mutations in the HIV reverse transcriptase gene by using probes optimized to function together in a reverse-hybridization assay.
                                                                                                                                           Human immunodeficiency virus; HIV; reverse transcriptase; RT; enzyme; detection; mutation; anti-HIV drug resistance; polymorphism; resistance;
                                                                                                    HIV-1 reverse transcriptase mutation detection probe SEQ ID NO:882.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 2; Page 29; 117pp; English.
                                                                                                                                                                                                                                      Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                11-JAN-2001; 2001EP-00870005.
20-APR-2001; 2001EP-00870085.
24-APR-2001; 2001US-0286102P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (INNO-) INNOGENETICS NV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Smet K, Stuyver L;
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                                                                                                                                                                                                                                                                                                    WQ200255741-A2
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                                                                                                                                                                                                  probe; ss.
                                                                                                                                                                                                                                                             Synthetic.
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RESULT 1488 ABX01539 ID ABX01539 standard; RNA; 14 l 793 GICICCIGIAGIAA 806 Grereriana 1 14 ò В

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Gaps

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0.5%; Score 10.8; DB 1; Length 14; 85.7%; Pred. No. 7.4e+02; ive 0; Mismatches 2; Indels

Local Similarity 85.7 ses 12; Conservative

Query Match

Sequence 14 BP; 5 A; 5 C; 1 G; 3 T; 0 U; 0 Other;

nucleic acid, PNA, personal care product, pharmaceutical, food l sample, beverage, dairy product, environmental sample, yeast,

probe; ss.

Peptide n

Candida glabrata specific PNA probe #3.

(first entry)

28-MAY-2003

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The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or inbozyme is in a harmerhead (HH). The carginal control of the substrate sequences defined in the specification. The HCV is controlled for modulating the expression and/or replication of HCV. They can be used to treat circhosis, liver failure and/or hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon. The present sequence represents a substrate for a HCV hairpin (HP) ribozyme. Note: Some of the sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was contained in electronic format directly from the USPTO web site at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.
                                                                                                                       Enzymatic nucleic acid, RNA cleavage, Hepatitis C virus infection, HCV ribozyme, HCV expression, HCV replication, cirrhosis, virucide, liver failure, hepatocellular carcinoma, HCV infection, drug therapy, type I interferon, interferon alpha, interferon beta, cytostatic, interferon gamma, consensus interferon, hepatotropic, antiinflammatory, substrate, hairpin ribozyme, HP ribozyme, se.
                                                                                      Hepatitis C virus substrate #24 for HCV hairpin ribozyme #24.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Slatt L, Mcswiggen JA, Roberts B, Pavco PA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 2; Page 59; 80pp; English
                                                                                                                                                                                                                                                                                                                                                                     99US-00274553.
                                                                                                                                                                                                                                                                                                                                                                                                      99US-00274553.
                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                          BLATT L.
MCSWIGGEN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                      (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J.
(ROBE/) ROBERTS B.
(PAVC/) PAVCO P.A.
(MACE/) MACEJACK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-617759/66
                                                                                                                                                                                                                                                      Hepatitis C virus.
                                                                                                                                                                                                                                                                                           JS2002082225-A1.
                                                                                                                                                                                                                                                                                                                                                                     23-MAR-1999;
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                                                    23-DEC-2002
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                 ABX01539;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to peptide nucleic acid (PNA) probe comprising a probing nucleobase sequence. The PNA probes are useful for detecting, identifying and/or quantifying Candida yeast in clinical samples, food, beverages, water, dairy products or environmental samples, personal care products, pharmaceutical products, for analysing or detecting the presence of a nucleic acid within an organism, or for the analysis of organisms or a nucleic acid extracted from or derived from an organism of interest. The present sequence is a probing nucleobase sequence of PNA probe specific for Candida glabrata. This sequence is used for detection of Candida yeast
                                                                                                                                                                                                        /*tag= a
/mod base= OTHER
/mod= "This sequence is a peptide nucleic acid i.e. it
Contains a polyamide backbone instead of a phosphodiester
backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New peptide nucleic acid probes comprising a probing nucleobase sequence, useful for detecting, identifying and/or quantifying one or more species of Candida yeast in clinical samples, food, beverages, or environmental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.5%; Score 10.8; DB 1; Length 14; Best Local Similarity 85.7%; Pred. No. 7.4e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oliveira KM, Rigby S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence 14 BP; 4 A; 7 C; 3 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mutated LRP5 exon fragment #23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hyldig-Nielsen JJ, Stender H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 2; Col 33; 25pp; English.
                                                                                                                                                                                                                                                                                                                                                                                           18-MAY-2001; 2001US-0292147P.
                                                                                                                                                                                                                                                                                                                                                              17-MAY-2002; 2002WO-US015634.
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ADB98861 standard; DNA; 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GCCGCCAAGCCACA 14
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                                                                                                                                                                                                                                                                                                                                                                                                                         (BOST-) BOSTON PROBES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-120805/11
                                                                                                                              Candida glabrata.
                                                                                                                                                                                                                                                                                                  WO200295052-A2.
                                                                                                                                                                               Key
modified base
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                                                                                                                                                Synthetic
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Gaps . 0

Query Match 0.5%; Score 10.8; DB 1; Length 14; Best Local Similarity 64.3%; Pred. No. 7.4e+02; Matches 9; Conservative 3; Mismatches 2; Indels

AAD53201 standard; DNA; 14 BP.

RESULT 1489 AAD53201

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AAD53201,

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21-JUN-2000; 2000WO-AU000693
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGFP-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; kearcosis; neophasia; scleroderme; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplamia; kidney disease; neobascular condition; hyperplamia; sidney disease;
                                                                                                                                                                                                                                                                                                                                    The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and the formulants, which results in a HBM-like phenotype when expressed in a cell. The HBM-like phenotype results in bone mass modulation and/or lipid level modulation. The invention is useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bone mass and/or lipid levels in a subject suffering from e.g. setellight state the invention.
                                                                                                                                                                                                                                                        New nucleic acid comprising a mutation in LRP5 or LRP6, useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bone mass and/or lipid levels in a subject
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                             Morales A, Yaworsky PJ, Liu W;
  Bone Mass; HBM; LRP5; Zmax1; LRP6;
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85.7%; Pred. No. 7.4e+02;
cive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 14 BP; 1 A; 2 C; 7 G; 4 T; 0 U; 0 Other;
 Osteopathic; Gene therapy; High Bone Ma
bone mass modulation; osteoporosis; ds.
                                                                                                                                                                                                                                                                                                                 Disclosure; Page 51; 629pp; English
                                                                                                                                                                                                               Graham JR,
                                                                                                                                                                                                                                                                                            suffering from e.g. osteoporosis.
                                                                                                                                                                           (GENO-) GENOME THERAPEUTICS CORP (AMMP ) WYETH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IGFBP3 oligonucleotide #1661.
                                                                                                                      11-MAY-2001; 2001US-0290071F.
17-MAY-2001; 2001US-029131IP.
01-FEB-2002; 2002US-0353058F.
04-MAR-2002; 2002US-0361293F.
                                                                                                13-MAY-2002; 2002WO-US014877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1086 AGGCTTCACCCCA 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF48241 standard; DNA; 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 85.7%
---nhes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14 AGGACTCACCCCA 1
                                                                                                                                                                                                               Allen K, Anisowicz A,
                                                                                                                                                                                                                                    WPI; 2003-129214/12
                                                      WO200292000-A2.
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                                                                             21-NOV-2002
                                  Synthetic
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleoride, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders, see AAF45151 and AAF45153- (chthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, inchipasis, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain growth factor—mediated malignancies, other sclerotic chisease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichhyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderme; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis, kidney disease;
                                                                                                                                                                                                                                                                                              Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 2 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                       Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 7; Page 55; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF48240 standard; DNA; 15 BP.
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99US-0140345P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                       CHILDRENS
                                                                                                                                                       Werther GA,
                                                                                                                                                                                                                               WPI; 2001-041421/05
                                                                       (MURD-) MURDOCH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200078341-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammation.
21-JUN-1999;
                                                                                                                                                       Wraight CJ,
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The present invention relates to a method for ameliorating the effects of antisense oligonucleotide, (for Insulin-like Growth Factor [IGF] receptor, IGF binding protein [IGFBP]-2 or ISFBP3, which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAP45151 and AAF45153-019gonucleotides of the present invention (see AAP45151 and AAF45153-P45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovasular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other selerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                 Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Selection of low frequency antigen-specific B lymphocytes - using antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Primer; amplify; human; heavy; H; kappa; K; chain; variable; V; lymphoblastoid; IgG; immunoglobulin; B cell; semi-nested PCR; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seguence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
                                                  Edmondson SR;
                (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                         Example 7; Page 55; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92US-00848249.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1012 CCTGAAAAAGAGGG 1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ48499 standard; DNA; 15
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(first entry)
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                                                  Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTGAAGAGGAGGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1993-303408/38.
                                                                                  WPI; 2001-041421/05
                                                                                                                                                                       inflammation.
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26-JUN-1992;
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14-MAR-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ48499;
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AAQ48499/c
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The sequences given in AAQ48499-514 are primers which amplify human heavy corresponding segments almost 100% of the time in single cells taken from the human lymphoblastoid 100% of the time in single cells taken from the human lymphoblastoid 100% of the time in single cells taken from first five amino acids of the mature immunoglobulins and cover the known sequences from single B cells is amplified by semi-nested PCR. The sequences from single B cells is amplified by semi-nested PCR. The procedure calls for two rounds of PCR amplification. The same sets of degenerate 5' VM and VM primers are used for both rounds of PCR, whereas the 3' primers used in the second round of PCR are derived from the insert of internal region towards the 3'-end of the DNA fragments amplified in the first round. Therefore in the second round of PCR the 5' end is not nested but the 3'-end is. The VM and VL gene segments amplified by this method may be cloned and sequenced by incorporating them into an field.)
                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RNA; enzyme; enzymatic RNA molecule; ERM; cleave; RNA; mRNA; HDRNA; picornavirus; HIV; immunodeficiency virus; hepatitis B virus; HBV; papilloma virus; HBV; Epstein-Barr virus; BBV; TCIV; T-Cell leukaemia virus; hepatitis C virus; HCV; cytomegalovirus; influenza virus; HSV; heppes simplex virus; vector; immune response; antibody; ribozyme; viral RNA; treatment; ss.
probes and isotype probes with fluorescence activated cell sorting
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                                                                                                                                                                                                                                                                                                                                                                  0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 2 A; 2 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytomegalovirus target sequence 11.
                                  Disclosure; Page 30; 42pp; English.
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920S-00882713.
920S-00882713.
920S-00882823.
920S-00882886.
920S-00882886.
920S-00882886.
920S-00882889.
920S-00882889.
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92US-008B4073.
92US-008B4074.
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(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                    12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
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14-MAY-1992;
14-MAY-1992;
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26-MAY-1994
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                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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The sequences (AAQ52824-Q52890) are pref. Cytomegalovirus target sequences for enzymatic RNA molecules. The RNA molecules are complementary to a substrate binding region in the specified gene target. They also have enzymatic activity, in that they specifically cleave RNA in the target. The ERMS interfere with viral replication and therefore have anti-viral properties. They can be used to attenuate viruses to be used in vaccines. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        \mathtt{Enzymatic} \mathtt{RNA} molecules - used to inhibit viral replication, infection and gene expression.
                                                                                                                                                                                                                                                                                                                                                                                         Draper KG, Dudycz LW, Mcswiggen JA, Macejak DG, Holecek JJ;
Mamone JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; rative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 0 A; 7 C; 0 G; 0 T; 8 U; 0 Other;
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                                    9205-0088287
9205-00882824
9205-00882886
9205-00882886
9205-00882886
9205-00882829
9205-0088292
9205-0088292
9205-0088407
9205-0088407
9205-00884432
9205-00884436
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  92US-00882689
                        92US-00882713
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92US-00987130
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                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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Best Local Similarity 85.77
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14 AAAAAAAGGGGGG 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised
                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1993-386599/48.
                                                                                                                                                                14-MAY-1992;
14-MAY-1992;
14-MAY-1992;
14-MAY-1992;
14-MAY-1992;
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02-MAY-1995
                                                                                                                            4-MAY-1992;
4-MAY-1992;
4-MAY-1992;
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AAQ73360/C
XX
AC AAQ73360
AC AAQ73360
DT 25-MAR-2
DT 02-MAY-1
XX
XX
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                                                                                                                                                                                                                                                                                                                                The sequences (AAQ52824-Q52890) are pref. Cytomegalovirus target sequences for enzymatic RNA molecules. The RNA molecules are complementary to a substrate binding region in the specified gene target. They also have enzymatic activity, in that they specifically cleave RNA in the target. The ERMs interfere with viral replication and therefore have anti-viral properties. They can be used to attendate viruses to be used in vaccines. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                     Enzymatic RNA molecules - used to inhibit viral replication, infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RNA; enzyme; enzymatic RNA molecule; ERM; cleave; RNA; mRNA; HnRNA; picornavirus; HIV; immunodeficiency virus; hepatitis B virus; HBV; papliloma virus; HPV; Epstein-Barr virus; EBV; TCIV; T-cell leukaemia virus; hepatitis C virus; HCV; cytomegalovirus; influenza virus; HSV; herpes simplex virus; vector; immune response; antibody; ribozyme; viral RNA; treatment; ss.
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                                                                                                                                                                                                        Draper KG, Dudycz LW, Mcswiggen JA, Macejak DG, Holecek JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.5%; Score 10.8; DB 1; Length 15; 35.7%; Pred. No. 9e+02; ative 7; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 0 A; 7 C; 0 G; 0 T; 8 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytomegalovirus target sequence 11
                                                                                                                                                                                                                                                                                                          Claim 5; Fig 13; 287pp; English
92US-0088433.
92US-0088442.
92US-00884431.
92US-00884521.
92US-00825378.
92US-00935854.
92US-0093686.
92US-00948359.
92US-00987129.
92US-00987129.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ52834 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
(first entry)
                                                                                                                                                                                (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1993-386599/48.
                                                                                                                                                                                                                                                                                   and gene expression
             14-MAY-1992,
14-MAY-1992,
14-MAY-1992,
14-MAY-1992,
26-AUG-1992,
26-AUG-1992,
16-SEP-1992,
15-OCT-1992,
07-DEC-1992,
07-DEC-1992,
07-DEC-1992,
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26-MAY-1994
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                                                                                                                                                                                                                   Mamone JA;
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Gaps

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Selecting antigen-specific B lymphocytes - by fluorescence activated cell
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                                                                                                                                                                                                                                                  New modified oligo-nucleotide contg guanine quartet - inhibits activity of viruses, e.g. HIV, and phospholipase A2 and modulates telomere length of chromosomes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Primer, amplification; Vh; heavy chain, antibody; B cells; lymphocyte; immunoglobulin; PCR; polymerase chain reaction; ss.
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                                                                                                                                                    Brown-Driver VL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Degenerate oligonucleotide for amplifying V heavy chain gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Scoré 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                    P, Bennett CF, Chiang M,
Wyatt JR, Imbach JL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 2 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 18; 144pp; English.
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                                 93WO-US009297.
                                                                            92US-00954185.
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                                                                                                                                                        RC, Anderson F
I, Vickers TA,
                                                                                                                (ISIS-) ISIS PHARM INC
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-MAR-1992;
                                      29-SEP-1993;
                                                                            29-SEP-1992;
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14-FEB-1995
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  14-APR-1994
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                                                                                                                                                                            Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chang TW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ68539
                                                                                                                                                           Hanecak
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequences given in AAQ73325-81 represent oligonucleotides which hybridise specifically with DNA or RNA from a herpes virus gene corresponding to one of the open reading frames UI5, -8, -9, -50, -27, -30, -42, -52 or 18175 of herpes simplex virus type I (HSV-1). These oligos pref. hybridise with a translation initiation site, a coding region or a 5' untranslated region. These oligos may be used in compositions for the treatment and diagnosis of herpes viral infection, by contecting the virus or the animal, or its cells, tissues or body fluids with the oligo. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                New oligonucleotide(s) hybridising with DNA or RNA of herpesvirus gene are used in the treatment and diagnosis of herpes simplex virus, cytomegalovirus, Epstein Barr virus and varicella zoster infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Inhibition, replication, herpes simplex virus, HSV, HIV, human cytomegalovirus; influenza virus, influenzation neurological disorders, phospholipase A2 activity, hyperproliferation, malignancy, cardiovascular disease, snake bite; malignancy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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/note= "Phosphorothionate intersugar linkages"
                                                                                                                                                                                                                                                                                                  Hanecak R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
Hybridise, herpes simplex virus, HSV, open reading frame, translation initiation site, coding region, 5' UTR, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HSV replication inhibiting oligomer, ISIS no 4885.
                                                                                                                                                                                                                                                                                              rooke ST, Mirabelli CK, Ecker DJ,
Brown-Driver VL, Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 2 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
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(first entry)
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                                                                                                                                                                                                                                                                                                  Crooke ST,
                                                                                                                                                                                                                                                                                                                                                          WPI; 1994-302552/37.
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                                                                                                                                                                                                                                                                                                                      Anderson KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9408053-A1
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                                                                                                                                                                                07-MAR-1994;
                                                                                                                                                                                                                      12-MAR-1993;
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04-NOV-1994
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                                                           Synthetic.
                                                                                                                                                                                                                                                                                                  Draper KG,
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Sequence 15 BP; 8 A; 3 C; 3 G; 1 T; 0 U; 0 Other;
                                       Query Match
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AAQ81719/c
ID AAQ81719
                                                                                                                                                       RESULT 1500
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                                                                 Matches
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                                                             This oligonucleotide is suitable to be used as a 5' end primer for human who chain coding segments. The preferred set of 5' end primers for Wh consists of 5 degenerate groups of oligonucleotides and one nondegenerate oligonucleotide (AAQ68539-44), totaling 53 sequences. This set of primers corresponds to the first 5 amino acids of the mature immunoslobulins and sequenced. The variations in this sequence which yield these other sequenced. The variations in this sequence which yield these other oligonucleotides are that the first quantidine uncleotide can be a cytosine, the sixth guanidine can be a thymidine and the thirteenth guanidine can be a thymidine do correct PF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     fibrosis gene. The primers are designed to be complementary to eight of the most common mutations within the CP gene. Detection is carried out by the incorporation of a labelled dideoxynucleotide. Individuals carrying the mutation incorporate a different base as opposed to normal individuals. This primer detects the delta-507 mutation site by the incorporation of dadTP as opposed to ddGTP. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The primers (AAQ55452-62) are use to detect mutations within the cystic
                                                                                                                                                                                                                                                                     Gaps
sorting using at least 2 different antigen probes with fluoro:chrome
labels.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Determining identity of nucleotide base - by using primer extension process, useful for typing of samples and genotype identification.
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85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                  Sequence 15 BP; 2 A; 2 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Detection primer for cystic fibrosis mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sxample A; Page 24; 42pp; English.
                                       Disclosure; Col 15; 11pp; English.
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92US-00919872.
                                                                                                                                                                                                                                                                                          1137 CTCCAGCTCCACCT 1150
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(first entry)
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Best Local Similarity 85.7%
Warches 12; Conservative
                                                                                                                                                                                                                                                                                                                  caccaderigeacer 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1994-034981/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cystic fibrosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9401447-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUL-1993;
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27-JUL-1992;
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19-JUL-1994
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AAQ55453/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New anti-sense polynucleotide(s) to fibroblast growth factor receptor used for inhibiting vascular smooth muscle cell proliferation, partic. for treating restenosis.
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                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fibroblast growth factor; hybridisation; laser procedures; vascular smooth muscle cell; proliferation; SMC; vascular stenosis; post angioplasty restenosis; atherosclerosis; cardiac hypertrophy; organ transplant; ss.
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0.5%; Score 10.8; DB 1; Length 15; larity 85.7%; Pred. No. 9e+02; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense oligonucleotide for mouse FGF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TEXA-) TEXAS BIOTECHNOLOGY CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 3; Page 9; 53pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Denner LA, Rege AA, Dixon RA;
                                                                                                                                                                                                                                                                                                                   AAQ70346 standard; DNA; 15 BP.
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                                                                                                                    911 TCTTTGGTCTTTGC 924
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nes 12; Conservative
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                          Local Similarity
nes 12; Conserv
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15-FEB-1995
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                                                                                                                                                                                                                                                                                                                                                                         AAQ70346;
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(first entry) (revised)

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Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downegulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TWF-alpha; respiratory syncylal virus; RSV, bcr-abl; oncogene; translocation; circnic myelogenous leukeemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; Theumatoid arthritis; psoriasis; myocardial ischammatoid arthritis; psoriasis; myocardial ischamma; Kawasek; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                      RSV N hammerhead ribozyme target sequence (nt. position 449).
                                                                                                                                                                                                                                  Respiratory syncytial virus.
                                                                                                                                                                                                                                                               WO9523225-A2
25-MAR-2003
15-MAR-1997
                                                                                                                                                                                                                                                                                          31-AUG-1995
 Oligonucleotides (AAQ81716-20) are antisense oligonucleotides complementary to the mRNA of the fibrogenic cytokine tumour necrosis factor-alpha (Thr-alpha) which inhibit expression of this cytokine. The oligonucleotides may contain phosphorothicate linkages to render the nuclease resistant. They are used to inhibit scar formation at a wound site by preventing the production of fibrogenic cytokines such as transforming growth factor-beta (Tepbeta), Thr-alpha, platelet derived growth factor (PDGF), fibroblast or epithelial growth factors (FGF or at the wound periphery. The oligonucleotides reduce collagen content of the wound and increase tensile strength. Treated wounds are indicatinguishable from normal tissue. (Updated on 25-MAR-2003 to correct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New anti-sense oligo-nucleotide(s) to mRNA of fibrogenic cytokine - esp. transforming growth factor-beta and platelet derived growth factor, used topically to inhibit scar formation at wound sites.
                                                                                                        Antisense; fibrogenic; cytokine; transforming growth factor-beta; TGF-beta; phosphorothioate; scar; wound; tumour necrosis factor-alpha; TNF-alpha; platelet derived growth factor; PDGF; fibroblast; epithelial; growth factor; RGF; EGF; interleukin; IL-1; IL-6; collagen; ss.

    15
    /*tag= a
    /note= "nucleotide linkages may be phosphorothioate"

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 1 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                 Antisense oligonucleotide #14 to TNF-alpha mRNA.
                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 6; Page 24; 28pp; English
                                                                                                                                                                                                                                                                                                                                                              93KR-00010883.
                                                                                                                                                                                                                                                                                                                                    94WO-KR000066
                                                                                                                                                                                                                                                                                                                                                                                                       (ILYA-) IL YANG PHARM CO LTD
                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.5
Best Local Similarity 85.7
Matches 12; Conservative
                                          (revised)
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                                                                                                                                                                                                                       misc_difference
                                                                                                                                                                                                                                                                                                                                                              15-JUN-1993;
                                                                                                                                                                                                                                                                                                                                    11-JUN-1994;
                                         25-MAR-2003
06-SEP-1995
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                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                  Chung HT;
              AAQ81719;
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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a protein of respiratory syncytial virus (RSV) at the nucleotide base postition indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chowrira B, Direnzo A, Draper KG, Dudycz LW; isky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; P, Beigleman L, Shllivan SM, Sweedler D, Thompson JD; N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 2; Page 274; 407pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Karpeisky A, Kisich K
Pavco P, Beigleman L,
Usman N, Wincott FE,
94US-00201109.
94US-00218934.
94US-00224483.
94US-00224483.
94US-00224536.
94US-00291932.
94US-00291633.
94US-00291633.
94US-003914397.
94US-00314397.
94US-00314397.
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94US-00314397.
94US-00314397.
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                                                                                                                                                                                                                                                 19-AUG-1994;
                                                                                                                                                                                                                                                                                                                      23-SEP-1994;
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                                                                                                                                                                                                                                                                                                 08-SEP-1994
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Modak A,
Tracz D,
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Gaps

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754 ACCIGCCAIGCAGG 767

14 AGCTGCCAGGCAGG 1

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AAT57285 standard; RNA; 15

1502

RESULT 15

(revised)

27-AUG-2003

AAT57285;

HXXXH

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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleotideb base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant refjection and alleviating symptoms in patients with rheumatoid arthritis, asthma and other inflammatory disorders. (Updated on 25-WAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bnzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RS; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atheroselerosis; myoardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                        Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                           Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 4 A; 6 C; 2 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                Claim 2; Page 173; 407pp; English.
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94US-00222795.
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(first entry)
                      (RIBO-) RIBOZYME PHARM INC.
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29-MAR-1994;
04-APR-1994;
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07-APR-1997
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synthesised with modifications that improve their nuclease resistance. The ribozymes ofleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human ICAM hammerhead ribozyme target sequence (nt. position 1750)
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                                                                                                                                                        0.5%; Score 10.8; DB 1; Length 15; 78.6%; Pred. No. 9e+02; ative 1; Mismatches 2; Indels
                                                                                                                 Sequence 15 BP; 4 A; 3 C; 6 G; 0 T; 2 U; 0 Other;
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9405 - 00224558.
9405 - 00245736.
9405 - 00291332.
9405 - 00291332.
9405 - 00291332.
9405 - 0029520.
9405 - 0029520.
9405 - 00314397.
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94US-00218934.
94US-00222795.
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18-MAR-1997 (first entry)
                                                                                                                                                 Query Match
Best Local Similarity 78.6%
Matches 11, Conservative
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115-APR-11994
116-APR-11994
116-AUG-11994
116-AUG-11994
117-AUG-11994
117-AUG-11994
117-AUG-11994
118-AUG-11994
118
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23-DEC-1994;
30-JAN-1995;
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Gaps

Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; dironic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atheroselrosis; myorardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;

Respiratory syncytial virus.

WO9523225-A2

RSV 1C hammerhead ribozyme target sequence (nt. position 163)

(revised)
(first entry)

25-MAR-2003 24-APR-1997

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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the nuclectide base position indicated in the DE line. The relA gene product is a subunit of the transcriptional regulator NF-kappaB and is implicated specifically in the induction of inflammatory responses. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target cusful for treating rheumatoid arthritis, restenosis and asthma as well as for increasing tolerance to transplanted tissues. The potentially immunosuppressive properties of a ribozyme that cleaves relA mRNA means that uses are limited to local delivery, acute indications or ex vivo
                                                                                                                                                                                                                                                                                                                                                                                                           Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Stinch S, Karpelsky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; Tracz D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ribozymes having modified bases and methods for producing them - for in inhibiting disease related genes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 2; Page 225; 407pp; English.
94US-00224483.
94US-00227958.
94US-00245746.
94US-00271280.
94US-00291932.
94US-00291633.
94US-00292620.
94US-00293620.
94US-00293620.
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94US-00311749.
94US-00314397.
94US-00314397.
94US-00319493.
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94US-00357577.
94US-00363233.
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94US-00337608
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                                           18-MAY-1994)
06-JUL-1994)
15-AUG-1994;
16-AUG-1994;
17-AUG-1994;
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23-SEP-1994;
28-SEP-1994;
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07-OCT-1994;
11-OCT-1994;
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10-NOV-1994;
28-NOV-1994;
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23-DEC-1994;
30-JAN-1995;
                                                                                                                                       02-SEP-1994;
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Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and
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                                                                                                                                                                                                                                                             94US-00201109.
94US-0021834.
94US-00224483.
94US-00224483.
94US-00224081.
94US-00245736.
94US-00291932.
94US-00291433.
94US-00291632.
94US-00391839.
94US-003111486.
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94US-00316771.
94US-00319492.
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94US-00334847.
94US-00337608.
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94US-00357577
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18-MAY-1994
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Gaps

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0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; rative 0; Mismatches 2; Indels

731 AGGAGAAACAGAAC 744

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12; Conservative

Similarity

Query Match Best Local S

Matches

14 AGGGGAAACAGATC 1

AAT57034 standard; RNA; 15 BP.

RESULT 1505

AAT57034/

(revised)

27-AUG-2003

AAT57034;

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94US-00201109.
94US-00218934.
94US-00222795.
 95US-00380734.
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Best Local Similarity 50.03
Matches 7; Conservative
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                                                                                   WPI; 1995-351090/45.
                                      Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
  30-JAN-1995;
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18-APR-1997
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04-APR-1994;
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                                              Grimm S,
Modak A,
Tracz D,
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synthesised with modifications that improve their nuclease resistance. The riboxymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI field.)
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                                                                Score 10.8; DB 1; Length 15; Pred. No. 9e+02; 0; Mismatches 2; Indels
                                               Sequence 15 BP; 8 A; 2 C; 0 G; 0 T; 5 U; 0 Other;
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94US-00218934.
94US-00224483.
94US-00224588.
94US-00225984.
94US-0021828.
94US-00291433.
94US-00291433.
94US-00291433.
94US-00391433.
94US-00391433.
94US-00311446.
94US-00311449.
94US-003119493.
94US-003119493.
94US-003119493.
94US-003119493.
94US-003119493.
94US-003119493.
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                                                                 Query Match
Best Local Similarity 85.7%;
Matches 12; Conservative
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(revised)
(first entry)
                                                                                                       944 TIGGITIAAIGIAI 957
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25-MAR-2003
04-APR-1997
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15-AUG-1994;
16-AUG-1994;
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19-AUG-1994;
02-SEP-1994;
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15-APR-1994;
18-MAY-1994;
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                                                                        ub DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
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                                                                                                                                                                                                                                                                                                                                                                                                 Ribozymes having modified bases and methods for producing them ^{-} for use in inhibiting disease related genes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 4 A; 5 C; 1 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 2; Page 266; 407pp; English.
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(RIBO-) RIBOZYME PHARM INC.
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(revised)
(first entry)

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Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TWF-alpha; respiratory syncytial virus; RSV; bcr-ab; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                    RSV N hammerhead ribozyme target sequence (nt. position 1181)
                                                                                                                                                                                                                             Respiratory syncytial virus.
                                                                                                                                                                                                                                                                                                                                                                                                       15-APR-1994;
18-MAY-1994;
06-JUL-1994;
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03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
04-NOV-1994;
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23-SEP-1994;
23-SEP-1994;
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16-AUG-1994;
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02-SEP-1994;
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 25-MAR-2003
19-MAR-1997
                                                                                                                                                                                                                                                                                   31-AUG-1995
 The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the nucleotide base position indicated in the DE line. The relA gene product is a subunit of the transcriptional regulator NF-kappaB and is implicated specifically in the induction of inflammatory responses. Regions of the mRNA that do not form secondary folding structures and that contain operations of the premise and harmerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit relA expression, making them potentially useful for treating rheumatoid arthritis, restenosis and asthma as well as for increasing tolerance to transplanced tissues. The pocential as for increasing tolerance to transplance that cleaves relA mRNA means that uses are limited to local delivery, acute indications or ex vivo treatment. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                    o DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpelsky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Bejeleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 1 A; 8 C; 4 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 2; Page 228; 407pp; English.
94US-00224483.
94US-00227958.
94US-002245736.
94US-0021280.
94US-00291932.
94US-00291433.
94US-00291433.
94US-00390800.
94US-00311486.
94US-00311486.
94US-00311486.
94US-00311486.
94US-00311486.
94US-00311486.
94US-00311486.
94US-00311486.
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                                         18-MAY 1994)
06-JUL 1994)
16-AUG 1994)
16-AUG 1994)
17-AUG 1994)
02-SEP 1994)
08-SEP 1994)
23-SEP 1994)
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03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
04-NOV-1994;
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16-DEC-1994;
23-DEC-1994;
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Modak A,
Tracz D,
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94US-00218934. 94US-00224795. 94US-002227958. 94US-002287958. 94US-00228735. 94US-00291832. 94US-00291832. 94US-00291832. 94US-00291832. 94US-00291833. 94US-00391893. 94US-00311749. 94US-00311749. 94US-00311749. 94US-003119497.

94US-00201109 95WO-IB000156

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ub DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and
                                                                                                                                                                                                                                                                                                                                                                                                                                      Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
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94US-00363233
95US-00380734
                                                                                                       (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                      WPI; 1995-351090/45.
                                   30-JAN-1995
                                                                                                                                                                                       Stinchcomb
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Modak A,
Tracz D,
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Gaps

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1048 AAGCCCCTGGCCCC 1061

8

Best Local Similarity 78.6 Matches 11; Conservative

BP.

AAT57431 standard; RNA; 15

RESULT 1508

(revised)

27-AUG-2003

AAT57431;

AAT57431/c ID AAT574 XX AC AAT574 XX DT 27-AUG

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Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; dironic myelogenous leukaemia, CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; transplant rejection; rheumatoid arthritis; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; Kawaeski disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human ICAM hammerhead ribozyme target sequence (nt. position 2759).
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94US-00222795.
94US-00224483.
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             (RIBO-) RIBOZYME PHARM INC.
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24-MAR-1997 (first entry)
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                                                                                              WBI; 1995-351090/45.
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29-MAR-1994;
04-APR-1994;
07-APR-1994;
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synthesised with modifications that improve their nuclease resistance. The riboxymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct OS field.)
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                                                                                                                                                                                                                                                                                                Human ICAM hammerhead ribozyme target sequence (nt. position 1509)
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                                                                               . Match 0.5%; Score 10.8; DB 1; Length 15; Local Similarity 85.7%; Pred. No. 9e+02; les 12; Conservative 0; Mismatches 2; Indels
                                                          Sequence 15 BP; 4 A; 1 C; 4 G; 0 T; 6 U; 0 Other;
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94US-00218934.
94US-00224483.
94US-00224483.
94US-00224483.
94US-0029132.
94US-0029133.
94US-00303039.
94US-00314397.
94US-00314397.
94US-00314397.
94US-0031693.
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                                                                                                                               979 AAGCTCTACTCCAT 992
                                                                                                                                                                                                              AAT51908 standard; RNA; 15
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(first entry)
                                                                                                                                                      14 AAGCTCTACATCAT 1
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18-MAY-1994;
06-JUL-1994;
15-AUG-1994;
16-AUG-1994;
17-AUG-1994;
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09-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
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04-APR-1994;
07-APR-1994;
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02-SEP-1994;
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07-OCT-1994;
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                                                                                    Query Match
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Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                    Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
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0.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 9e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
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b DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; Usman N, Wincott FE, Woolf T;
Bnzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia, CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atheroselerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
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940S-00224795
940S-00227958
940S-00227958
940S-0021620
940S-0021632
940S-00292620
940S-00293520
940S-00293520
940S-00393520
940S-0031899
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                                                                                                                                                                                                                                     Respiratory syncytial virus.
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29-MAR.1994;
07-APR.1994;
07-APR.1994;
15-APR.1994;
18-MAY.1994;
18-MAY.1994;
16-AUG-1994;
16-AUG-1994;
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19-AUG-1994)
02-SEP-1994)
08-SEP-1994,
23-SEP-1994,
23-SEP-1994,
03-OCT-1994,
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Modak A,
Tracz D,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Grimm S, Karpelsky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Modak A, Pavco P, Balglemen L, Sullivan SM, Sweedler D, Thompson JD; Tracz D, Usman N, Wincott FE, Woolf T;
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          940S-00228941.
940S-00228841.
940S-00271280.
940S-00291332.
940S-00292620.
940S-00292620.
940S-0039320.
940S-0039320.
940S-00311486.
940S-00311486.
940S-00311486.
940S-00311486.
940S-00311486.
940S-00311486.
940S-00311497.
940S-00316771.
940S-00316771.
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940S-00316771.
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(revised)
(first entry)
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AAT57036/c
ID AAT57036 standard, RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC.
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15 AGAGCGAGAGCTTG 2
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25-MAR-2003
24-APR-1997
            15-APR-1994

18-APR-1994

18-APR-1994

15-AUG-1994

11-AUG-1994

11-AUG-1994

11-AUG-1994

11-AUG-1994

11-AUG-1994

12-SEP-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

24-SEP-1994

26-SEP-1994

27-OCT-1994

11-OCT-1994

11-OCT-1994

11-OCT-1994

11-OCT-1994

11-OCT-1994

11-OCT-1994

11-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                             16-DEC-1994;
23-DEC-1994;
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RSV 1C hammerhead ribozyme target sequence (nt. position 164).

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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the nucleotide base position indicated in the DE line. The relA gene product is a subunit of the transcriptional regulator NF-KappaB and is implicated specifically in the induction of inflammatory responses. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit relA expression, making them potentially useful for treating rheumatoid arthritis, restenosis and asthma as well as for increasing tolerance to transplanted tissues. The potential communosuppressive properties of a ribozyme that cleaves relA mRNA means that uses are limited to local delivery, acute indications or ex vivo treatment. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Enzymatic nucleic acid, ribozyme, trans cleavage, inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpa, respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia (ML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; ransplant chromosome; inflammation; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial infarction; attoke; restenosis; myocardial; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
Sullivan SM, Sweedler D, Thompson JD; Woolf T;
                                                                                                                                          Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 1 A; 9 C; 1 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                   Claim 2; Page 225; 407pp; English.
      Beigleman L,
Wincott FE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94US-00201109.
94US-00218934.
94US-00222795.
94US-00224483.
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      Pavco P,
Usman N,
                                                                                            WPI; 1995-351090/45
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29-MAR-1994;
04-APR-1994;
07-APR-1994;
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      Modak A,
Tracz D,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dudycz LW;
Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse relA hammerhead ribozyme target sequence (nt. position 613).
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                                                             Score 10.8; DB 1; Length 15;
Pred. No. 9e+02;
0; Mismatches 2; Indels
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Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J,
      Sequence 15 BP; 7 A; 3 C; 0 G; 0 T; 5 U; 0 Other;
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94US-00292620.
94US-0020000.
94US-0030303039.
94US-00311749.
94US-00311749.
94US-00319492.
94US-00319492.
94US-00319492.
94US-00319493.
94US-00319493.
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94US-00218934.
94US-0022495.
94US-00227958.
94US-00228041.
94US-00245736.
94US-00245736.
                                                                                                                                                                                                                                                                                                                                                                                   AAT54831 standard; RNA; 15 BP.
                                                                0.5%;
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95US-00380734
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                                                                                                                                                                            944 TTGGTTTAATGTAT 957
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                                                          Query Match
Best Local Similarity 85.7<sup>3</sup>
Matches 12; Conservative
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07-APR-1997 (first en
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15-APR-1994;
18-MAY-1994;
06-JUL-1994;
15-AUG-1994;
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17-AUG-1994;
19-AUG-1994;
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08-SEP-1994;
23-SEP-1994;
23-SEP-1994;
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03-OCT-1994;
07-OCT-1994;
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04-NOV-1994
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16-DEC-1994
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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a protein of respiratory sproytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                b DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Winoct FE, Woolf T;
                                                                                        gene expression; downregulation; interfeukin-5; II-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; interacellular adhesion molecule; rel A; tumour necrosis factor; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; human immunodeficiency virus;
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                                                                           Enzymatic nucleic acid, ribozyme, trans cleavage; inhibition;
gene expression, downregulation; interleukin-5; IL-5; ICAM-1;
                                    RSV 1C hammerhead ribozyme target sequence (nt. position 76)
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94US-00291433.
94US-00293520.
94US-00300000.
94US-003100000.
94US-00311486.
94US-00311486.
94US-00311489.
94US-00311489.
94US-00312993.
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94US-00218934.
94US-00222795.
94US-00224483.
94US-00227958.
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94US-00345516
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                                                                                                                                                                                                                                                                                                                        Respiratory syncytial virus
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  (first entry)
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24-APR-1997
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Modak A,
Tracz D,
  The present sequence represents a preferred target sequence for an environmental much at the mucleotide base position indicated in the DE line. The relA gene product is a subunit of the transcriptional regulator NF-kappaB and is implicated specifically in the induction of inflammatory responses. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences of prompter analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit relA expression, making them potentially useful for treating rheumatoid arthritis, restenosis and aschma as well as for increasing tolerance to transplanted tissues. The potential inmunouppressive properties of a ribozyme that cleaves relA mRNA means that uses are limited to local delivery, acute indications or ex vivo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; Page 228; 407pp; English.
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                                    9405-00245736.
9405-00271280.
9405-00291932.
9405-00292620.
9405-00293520.
9405-00303039.
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94US-00314397
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94US-00334847
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94US-00345516
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Best Local Similarity 85.77
Matches 12; Conservative
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                                    18-MAX-1994

16-JUL-1994

15-AUG-1994

17-AUG-1994

17-AUG-1994

19-AUG-1994

19-SEP-1994

23-SEP-1994

23-SEP-1994
                                                                                                                                                                                                                                                               03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
04-NOV-1994;
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10-NOV-1994; 28-NOV-1994; 16-DEC-1994;

23-SEP-1994, 28-SEP-1994;

30-JAN-1995;

Stinchcomb

Grimm S, Modak A, Tracz D,

(revised)

27-AUG-2003 25-MAR-2003

AAT56992;

XX AC AATS XX AC AATS XX DT 27-2

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Matches

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AAT52280 RESULT

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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant arejection and alleviating symptoms in patients with rheumatoid arthritis, asthma and other inflammatory disorders. (Updated on 25-WAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Enkymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RV, bcr-ab; oncogene; translocation; dironic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; transplant rejection; rheumatoid arthritis; psoriasis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                        Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                    Ribozymes having modified bases and methods for producing them - for in inhibiting disease related genes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 4 A; 5 C; 1 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                  Claim 2; Page 178; 407pp; English.
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94US-00218934.
94US-00222795.
94US-00224483.
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(first entry)
(RIBO-) RIBOZYME PHARM INC.
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Best Local Similarity 57.1
Matches 8; Conservative
                                                                                                                                    WPI; 1995-351090/45.
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04-APR-1994;
07-APR-1994;
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18-APR-1997
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  The ribozymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-WAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse ICAM hammerhead ribozyme target sequence (nt. position 987).
                                                                                                                                                             ;
                                                                                                                  ; DB 1; Length 15;
9e+02;
thes 2; Indels
                                                                                Sequence 15 BP; 7 A; 0 C; 3 G; 0 T; 5 U; 0 Other;
                                                                                                                    0.5%; Score 10.8; D
57.1%; Pred. No. 9e+0
ative 4; Mismatches
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94US-00218934.
94US-00224483.
94US-00224483.
94US-00221932.
94US-0029132.
94US-0029132.
94US-0029132.
94US-0029132.
94US-0031439.
94US-0031499.
94US-0031493.
94US-0031493.
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1 AUUGAGUAUGAUAA 14
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(first entry)
                                                                                                                                                             8; Conservative
                                                                                                                          Query Match
Best Local Similarity
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03-OCT-1994;
07-OCT-1994;
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07-APR-1994;
15-APR-1994;
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17-AUG-1994;
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30-JAN-1995,
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02-APR-1997
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29-MAR-1994
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Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RS; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; Kawaeski disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; human immunodeficiency virus;
     Mouse ICAM hammerhead ribozyme target sequence (nt. position 723).
                                                                                                                                                                                                    Mus musculus.
                                                                                                                                                                                                                               WO9523225-A2.
The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the nucleotide base position indicated in the DE line. The relA gene product is a subunit of the transcriptional regulator NF-kappaB and is implicated specifically in the induction of inflammatory responses. Regions of the mRNA that do not form secondary folding structures and that contain product analysis. Ribozymes directed against these mRNA sequences were designed and halrpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their sequences and thereby inhibit relA expression, making them potentially useful for treating rheumatoid arthritis, restenosis and asthma as well as for increasing tolerance to transplanted tissues. The pocential infinuence properties of a ribozyme that cleaves relA mRNA means that uses are limited to local delivery, acute indications or ex vivo treatment. (Updated on 25-WAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                     b DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seguence 15 BP; 2 A; 4 C; 5 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 2; Page 228; 407pp; English.
                                                    94US-00291932.
94US-00291433.
94US-00292620.
94US-00293520.
94US-0030000000
                                                                                                                                    94US-00311486.
94US-00311749.
94US-00314397.
94US-00316771.
94US-0031993.
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94US-00337608.
94US-00345516.
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94US-00363233.
95US-00380734.
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                                                                                                                                    23-SEP-1994;
23-SEP-1994;
28-SEP-1994;
03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
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10-NOV-1994;
28-NOV-1994;
16-DEC-1994;
23-DEC-1994;
30-JAN-1995;
                                                    15-AUG-1994;
16-AUG-1994;
17-AUG-1994;
19-AUG-1994;
02-SEP-1994;
08-SEP-1994;
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                                                                                                                                                                                                                                                                                                                                                              Grimm S,
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Tracz D,
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The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozymes cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    b DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kieich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
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                                                                                        94US-00201109.
94US-00222495.
94US-00224483.
94US-00224483.
94US-00221932.
94US-00291433.
94US-00291433.
94US-00291433.
94US-00291439.
94US-00391439.
94US-00391439.
94US-00314397.
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19-AUG-1994;
02-SEP-1994;
08-SEP-1994;
                                                23-FEB-1995;
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07-OCT-1994
31-AUG-1995
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Modak A,
Tracz D,
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0; Gaps

818 GCCTGGAGTGCACG 831

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Best Loc Matches

2 ducuduadudcace 15

AAT52255 standard; RNA; 15

RESULT 1517

AAT52255

(first entry) (revised)

25-MAR-2003 01-APR-1997

AAT52255;

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(RIBO-) RIBOZYME PHARM INC.
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29-MAR-1994;
04-APR-1994;
07-APR-1994;
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rejection and alleviating symptoms in patients with rheumatoid arthritis, asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to correct PI field.)
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                                                                                                                                                                                                                            Human TNF-alpha hammerhead ribozyme target sequence (nt position 1224).
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                                                       Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 57.1%; Pred. No. 9e+02; Matches 8; Conservative 4; Mismatches 2; Indels
                                       Sequence 15 BP; 3 A; 5 C; 2 G; 0 T; 5 U; 0 Other;
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94US-00218934.
94US-00224483.
94US-00224483.
94US-002246736.
94US-0022132.
94US-00295620.
94US-00295620.
94US-00295620.
94US-00295620.
94US-00391439.
94US-00314486.
94US-00314486.
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94US-00314486.
94US-00314486.
94US-00314486.
94US-00314497.
94US-00314497.
94US-00314497.
94US-00314497.
94US-00314577.
94US-00314533.
                                                                                                                                                            AAT55768 standard; RNA; 15 BP.
                                                                                             1171 AACTTTGCGGCTCC 1184
                                                                                                        |||::: | ||:||
1 AACUTUTCAGCUCC 14
                                                                                                                                                                                                  (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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25-MAR-1997
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AAT55768
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Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Stinm S, Kazpeisky A, Risich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
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0.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 64.3%; Pred. No. 9e+02;
Matches 9; Conservative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 2 A; 7 C; 2 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 2; Page 242; 407pp; English.
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94US-00218934.
94US-00222795.
94US-00224483.
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14-MAY-1997 (first entry)
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b DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Karpelsky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the target sequences and can be used for treatment and diagnosis of EVV infection. (Updated on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct OS field.)
Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; rNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; othoric myelogenous leukeemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; hheumation athitis; psoriasis; myocardial ischaemia; Kawasak; disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 2; Page 276; 407pp; English.
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94US-00291433.
94US-00292620.
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94US-00300000.
94US-00303039.
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940S-00311749
940S-00316771
940S-00319492.
940S-00321993
940S-0032847.
940S-003468
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94US-00227958.
94US-00228041.
94US-00245736.
94US-00271280.
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94US-00222795
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                                                                                                                                                                                                   Respiratory syncytial virus.
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30-JAN-1995;
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Tracz D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Grimm S,
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                                                                                                                                                                                                                                                                                                                                                                                                               b DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Karpelsky A, Kisich K, Matulio-Adamic J, Mcswiggen JA; Pavco P, Beigleman I, Sullivan SM, Sweedler D, Thompson JD; Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a preferred target sequence for an the present sequence represents a ribozyme) which cleaves TNF-alpha mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit TNF-alpha expression, making them potentially useful for treating rheumatorid arthritis, septic shock and other inflammatory disorders including psoriasis, as well as for treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 3 A; 7 C; 2 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 2; Page 251; 407pp; English.
                 94US-00245786
94US-00245786
94US-00291433
94US-00291433
94US-00291200
94US-00291200
94US-00300000
94US-00311486
94US-00311486
94US-00311486
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94US-00311486
94US-00311486
94US-00311486
94US-00311486
94US-003114873
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            864 GGGCACTGAGGACT 877
                                                                                                                                                                                                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-AUG-2003
25-MAR-2003
19-MAR-1997
                                                                                                                                                                                                                                                                                                                               23-DEC-1994;
                                                                               16-AUG-1994;
17-AUG-1994;
                                                                                                                                                                                                                                                                               10-NOV-1994
28-NOV-1994
                                                                                                                                                                                                                                                                 04-NOV-1994
                                                                                                                                                                                                                                                                                                                 16-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                               Modak A,
Tracz D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT57432;
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                                                                                                                                                                                                                                                                                                                                                                                                                                Grimm S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1520
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BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;

Sequence 15

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This sequence represents a polynucleotide which forms part of a peptide nucleic acid (PRA) molecule of the invention. The invention relates to compounds comprising a PNA strand including at least one PNA unit having a pyramidine heterocyclic base which is a C-pyrimidine heterocyclic base. The jivention also relates to compounds which optionally consist of multiple strands for increased binding affinity. The compounds (designated PNA or bis PNA compounds) can bind to complementary nucleic acids with higher affinity and specificity than corresponding polynucleotides and are resistant to degradation by enzymes. They can be used for gene modulation, e.g. as gene targeted drugs for treating diseases such as cancer, viral infections or genetic diseases. They can also be used for research and in diagnostics for detection and isolation of specific nucleic acid sequences and as bitchhology and research probes, primers or artificial restriction curanded DNA, restriction enzyme sites, transcription inhibition.
                                                             ö
                                                                                                                                                                                                                                                                                                                           Peptide nucleic acid, PNA, c-pyrimidine heterocyclic base, cancer, iso-pyrimidine heterocyclic base, increased binding affinity, treatment, degradation resistant, gene modulation, viral infection, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New peptide nucleic acid cpds - having C-pyrimidine or iso-pyrimidine heterocyclic base substitutions and opt multiple strands for increased binding affinity.
                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Christensen L;
                                                             ;
0
                              Length 15;
                    Oligonucleotide #8 used in peptide nucleic acid sequence.
Sequence 15 BP; 4 A; 1 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dueholm KL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 56; Page 83; 116pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                , Buchardt O,
Griffith M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= a
/note= "T-Lys-NH2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC.
(PERS-) PERSEPTIVE BIOSYSTEMS.
(BUCH/) BUCHARDT D.
                                                                                                                                                                                                      AAZ60025 standard; DNA; 15 BP.
                            0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95WO-US009084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94US-00275951
                                                                                             973 AAGICCAAGCICIA 986
                                                                                                                     14 AACTCAAAGCTCTA 1
                                                                                                                                                                                                                                                                   11-APR-2000 (first entry)
                              Query Match
Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Egholm M, Nielsen P,
Coull JM, Kiely J, G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1996-188096/19.
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                                                                                                                                                                                                                                                                                                                                                                                                                              Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-JUL-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-JUL-1994;
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                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                      AAZ60025;
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The present sequence is the peptide nucleic acid (PNA) oligomer ISIS 8129, which specifically binds 1 strand of the NFKappaB transcription factor (TF) binding site on a double stranded DNA in an anti-parallel orientation, and displaces the 2nd strand of the double stranded DNA to inhibit the binding of NFKappaB to its binding site. As the PNA can inhibit the transcriptional activation of a gene, it can be used to treat diseases associated with TF mediated gene expression, e.g. inflammatory disease, ALDS, TF mediated cancer, atherosclerosis, Down's syndrome, Alzheimer's disease, amyotrophic lateral sclerosis and parkinson's disease. The PNA can also be use to identify TF associated with certain disease states. Specifically ISIS 8129 and its parallel binding partner ISIS 9151 bind a single copy of the target with high affinity to form a
                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligomer able to displace one strand of transcription factor binding site - inhibits binding of transcription factor and is useful for inhibiting expression of genes associated with inflammatory disease, AIDS, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .15 ^{\rm A} +tag= ^{\rm A} /+tag= ^{\rm A} /note= "nucleotides are bound to acetyl groups of N-(2-aminoethyl)-acetylglycine backbone, comprising additional amino-terminal glycine and carboxy-terminal lysinamide"
                                                                                                                                                                                                                                                                                                                                             Peptide nucleic acid; PNA; ISIS 8129; NFkappaB; binding site; transcription factor; inhibition; activation; treatment; disease; gene; expression; inflammation; AIDS; mediation; cancer; atherosclerosis; Down's syndrome; Allheimer's; Parkinson's; amyotrophic lateral sclerosis; identification; diagnosis; triple-helix; ss.
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0
             Length 15;
                                           2; Indels
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         0.5%; Score 10.8; DB 1;
85.7%; Pred. No. 9e+02;
iive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                   Peptide nucleic acid oligomer ISIS 8129.
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                                                                                                                                                                                                            BP.
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                                                                                   1016 AAAAAGAGGGGAG 1029
                                                                                                                                                                                                            AAT45456 standard; DNA; 15
                                                                                                                                                                                                                                                                                 (first entry)
Query Match
Best Local Similarity 85.7%
....hes 12; Conservative
                                                                                                                   15 AAAAGGAGAGGAG 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1996-518610/51.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9635705-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
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Mus sp.
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AAX65149/c
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                                                                                                                                                                                                                         Arthritic condition; graft tolerance; immune response; target; cleavage; mammerhead ribozyme; hairpin ribozyme; human; rebbit; mouse; collagenase; stromelygin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment
                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stinchcomb DT, Jarvis T, Draper K, Pavco P;
Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
Thompson JD, Modak A, Burgin A;
                          ..
0
 3; DB 1; Length 15;
9e+02;
                                                                                                                                                                                                     Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1781.
                         2
0.5%; Score 10.8; Dilarity 85.7%; Pred. No. 9e+0 Conservative 0; Mismatches
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94US-00363253.
94US-00360254.
95US-00426124.
95US-00432874.
95US-000951P.
95US-000951P.
95US-000951P.
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                                                1016 AAAAAGAGGGGAG 1029
                                                                                                                                AAX65149 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                              (first entry)
                                                                        15 AAAAGGAGAGGAG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           auto-immune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1996-300653/30.
  Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                            diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Beigelman L,
Mcswiggen J,
Karpeisky A,
                                                                                                                                                                                                                                                                                                                         WO9618736-A2.
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                                                                                                                                                                              20-JUL-1999
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02-MAY-1995
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                                                                                                        RESULT 1523
AAX65149
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the present invention
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the treatment of arthritis, induction of graft tolerance or treatment
                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pavco P;
Matulic-Adamic
                                                                                                                                                                                                                                    ö
                                                                                                                                                                                 Score 10.8; DB 1; Length 15;
Pred. No. 9e+02;
4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1781.
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                                                                                                                                      Sequence 15 BP; 3 A; 5 C; 3 G; 0 T; 4 U; 0 Other;
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94US-00363253.
94US-00363254.
95US-00390850.
95US-00426124.
95US-00434509.
95US-000931P.
95US-000931P.
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                                                                                                                                                                                    0.5%;
Similarity 57.1%;
8; Conservative '
                                                                                                                                                                                                                                                                                       757 TGCCATGCAGGTTT 770
                                                                                                                                                                                                                                                                                                                     2 UGCCAUCCAGGCUU 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX65149 standard; RNA; 15
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                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 8; Conserv
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Mcswiggen J,
Karpeisky A,
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02-MAY-1995;
04-MAY-1995;
07-JUL-1995;
07-JUL-1995;
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23-DEC-1994;
17-FEB-1995;
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05-OCT-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Enzymatic nucleic acid molecules having a hammer-head motif - used for the treatment of arthritis, induction of graft tolerance or treatment of auto-immune diseases.
be used to treat antigen presenting cells of a donor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used for treating articipant tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therezpy impacts on the expression of stromelysin without introducing the non-specific effects upon gene expression which accompany treatment with retinoids and dexamethasone. The concentration of fibozyme required to affect a therspectic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ', Jarvis T, Draper K, Pavco P;
Usman N, Wincott F, Matulic-Adamic
Modak A, Burgin A;
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                                                                                                                                                                                                              0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; 7ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human B7-1 hammerhead ribozyme target SEQ ID NO:1340.
                                                                                                                                                                                   Sequence 15 BP; 3 A; 5 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 10; Page 168; 307pp; English
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94US-00363253.
94US-00363254.
95US-00396850.
95US-00426124.
95US-00432874.
95US-000951P.
95US-000974P.
95US-0009974P.
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Thompson JD,
                                                                                                                                                                                                                                                                               829
                                                                                                                                                                                                                                                                                                                                                                                     AAX64708 standard; RNA; 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                          15 AAGCCTGGATGGCA 2
                                                                                                                                                                                                                                                12; Conservative
                                                                                                                                                                                                                                                                             AAGCCTGGAGTGCA
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                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                         present invention
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Mcswiggen J,
Karpeisky A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        diagnosis; ss
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17-FEB-1995;
20-APR-1995;
02-MAY-1995;
04-MAY-1995;
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05-OCT-1995;
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the present inventors a concerning a concerning to the present inventors and concerning the present inventors and (iv) a 1-C-allyl modification at position 4 of the ENA, (iii) at least ten 2-O-methyl modifications; and (iv) a 3'-end modification. The ENA's can inhibit collagenase and stromelysin production in the symbolic consistency of joints for the treatment or prevention of arthritis, and show that it is not concerned to the concerning of a donor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used for enhancing graft tolerance or for treating autoimmune disease, and for treating allerances or for treating autoimmune disease, and for treating allerance or for treating autoimmune disease, and for treating allerance or for treating autoimmune disease, and for treating allerances or for treating autoimmune disease, and for treating allerance in diagnosis. Ribozyme therapy impacts on the expression of stromelysin without introducing the non-specific effects upon gene expression which accompany treatment with retinoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , Jarvis T, Draper K, Pavco P;
Usman N, Wincott F, Matulic-Adamic J;
Modak A, Burgin A;
present invention describes a novel enzymatic nucleic acid (ENA)
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                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 78.6%; Pred. No. 9e+02; Matches 11; Conservative 1; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 1 A; 8 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stinchcomb DT,
Gustofson J, Ue
Thompson JD, Mc
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940S-00363254.
950S-00426124.
950S-00436374.
950S-000951P.
950S-000951P.
950S-000951P.
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                                                                                                                                                                                                                                                                                                                      present invention
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Mcswiggen J,
Karpeisky A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diagnosis; ss
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02-MAY-1995;
04-MAY-1995;
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07-JUL-1995;
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Example 5; Col 30; 27pp; English

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The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising; (i) at least 5 ribose residues (i) at 2-C-allyl modification at position 4 of the ENA; (iii) at least ten 2-C-methyl modifications; and (iv) a 3-end modification. The ENA's can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis, particularly ostecarthritis or rheumatoid arthritis. The ENA's can also be used to treat antigen presenting cells of a donor to induce tolerance of an alloantigen of a donor. They can also be used for centaing altergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of stromelysin without introducing the non-specific effects upon gene expression which accompany treatment with retinoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Prodn. of nucleoside dimers with methylenedioxy linkage - by reacting 5'-protected nucleoside 3'-methylthio:methyl ether and 3'-protected nucleoside with bromine.
           Enzymatic nucleic acid molecules having a hammer-head motif - used for the treatment of arthritis, induction of graft tolerance or treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OCH2O linkage; analogue; 2,6-diethylpyridine; DEP; molecular sieve;
tetrabutylammonium fluoride; TBAF; tetrahydrofuran; chemical synthesis;
THF: thioformacetal linkage; diagnostic agent; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 10.8; DB 1; Length 15;
Pred. No. 9e+02;
6; Mismatches 2; Indels
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                                                                                   Claim 10; Page 168; 307pp; English.
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89US-00448941.
90US-00559957.
91US-00690786.
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Best Local Similarity 42.9%;
Matches 6; Conservative 6
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1 AUTUGCUUAAUGUA 14
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                                                  auto-immune diseases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                   present invention
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24-APR-1991;
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Prodn. of nucleoside dimers with methylenedioxy linkage - by reacting 5'-protected nucleoside 3'-methylthio:methyl ether and 3'-protected nucleoside with bromine.
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                                   The invention relates to a method for linking a first nucleoside or oligonucleotide to a second nucleoside or nucleotide through an OCH2O linkage, starting with a 5'-protected nucleoside or nucleotide which is derivatised in the 3'-position with an OCH32Me group. The method comprises (a) treating the derivatised nucleoside or nucleotide and a 3'-protected nucleoside or nucleotide with bromine in the presence of 2', diethylpyridine (DEP) and molecular sleves; and (b) treating the product with tetrabutylammonium fluoride (TBAF) in tetrahydrofuran (THF). The OCH2O-linked dimers can be used in the synthesis of oligonucleotide analogues (containing thioformacetal linkages) e.g. useful as diagnostic agents (see WO9106629)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OCH2O linkage, analogue, 2,6-diethylpyridine, DEP; molecular sieve;
terraburylammonium fluoride, TBAF; tetrahydrofuran; chemical synthesis;
THF: thioformacetal linkage; diagnostic agent; ss.
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                                                                                                                                                                                                                                                                                      0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; cive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                      Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
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90US-00559957.
91US-00690786.
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Best Local Similarity 85.7°
Matches 12, Conservative
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30-JUL-1990;
24-APR-1991;
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AAX32948 standard; DNA; 15
AAX32948;
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             임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a method for linking a first nucleoside or oligonucleotide to a second nucleoside or nucleotide through an OCH2O linkage, starting with a 5'-protected nucleoside or nucleotide which is derivatised in the 3' position with an OCH2SMe group. The method protected nucleoside or nucleotide and a 3'-protected nucleoside or nucleotide with bromine in the presence of 2,6 diethylpyridine (DEP) and moleotide with bromine in the presence of 2,6 with tetrabutylammonium fluoride (TBAF) in tetrahydrofuran (THF). The orthologues (containing thioformacetal linkages) e.g. useful as diagnostic agents (see WO9106629)
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Prodn. of nucleoside dimers with methylenedioxy linkage - by reacting 5'-protected nucleoside 3'-methylthio:methyl ether and 3'-protected nucleoside with bromine.
  OCH2O-linked dimers can be used in the synthesis of oligonucleotide analogues (containing thioformacetal linkages) e.g. useful as diagnostic agents (see WO9106629)
                                                                                                                                                                                                                                                                                   OCH20 linkage; analogue; 2,6-diethylpyridine; DEP; molecular sieve; tetrabutylammonium fluoride; TBAF; tetrahydrofuran; chemical synthesis; THF: thioformacetal linkage; diagnostic agent; ss.
                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels
                                                                  0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                                             Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                       89US-00426286.
89US-00448941.
90US-00559957.
91US-00690786.
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                                                                                                               1016 AAAAAGAGGGGAG 1029
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                                                                                                                                                                                            AAX32949 standard; DNA; 15
                                                                                                                                                                                                                                                              Seg ID No: 16 of US5495009
                                                                                                                                                                                                                                       (first entry)
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Best Local Similarity 85.7°
Marches 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (GILE-) GILEAD SCI INC
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11-DEC-1989;
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The invention relates to a method for linking a first nucleoside or oligonucleotide to a second nucleoside or nucleotide through an OCH2O linkage, starting with a 5'-protected nucleoside or nucleotide which is derivatised in the 3' position with an OCH2SMe group. The method comprises (a) treating the derivatised nucleoside or nucleotide and a 3'-protected nucleoside or nucleotide with bromine in the presence of 2,6-protected nucleoside or nucleotide with bromine in the presence of 2,6-with tetrabutylammonium fluoride (TBAF) in tetrahydrofuran (THF). The OCH2O-linked dimers can be used in the synthesis of oligonucleotide and analogues (containing thioformacetal linkages) e.g. useful as diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Prodn. of nucleoside dimers with methylenedioxy linkage - by reacting 5'-protected nucleoside 3'-methylthio:methyl ether and 3'-protected
                                                                                                   OCH2O linkage; analogue; 2,6-diethylpyridine; DEP; molecular sieve; tetrabutylammonium fluoride; TBAF; tetrahydrofuran; chemical synthesis; THF: thioformacetal linkage; diagnostic agent; ss.
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                                                Oligo containing formacetal and thioformacetal linkages.
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89US-00448941.
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91US-00690786.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleoside with bromine.
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Best Local Similarity
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24-APR-1991;
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30-JUN-1999
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Oryctolagus cuniculus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Specifically designed oligodeoxyribonucleotides form triplexes in single-
or double-strand DNA at homopurine-homopyrimidine targets. These
triplexes block in vitro DNA synthesis by all DNA polymerases studied,
including Sequenases. Taq, vent, and Pol I. A similar phenomenon occurs
when DNA polymerases are supplemented with accessory replication
proteins, including SBS protein. Replication blockage is highly sequence-
specific and even one or two point substitutions within either the target
sequence or the oligonucleotide abolish the effect. Sequence-specific
blocking of DNA replication in vivo is facilitated by the methods and
compositions of the present invention. The present sequence is the ORF-Bc
human papilloma virus (HPV) target (position 436-452 in HPV57 and 438-452
in HPV2) for triplex-forming oligonucleotides AAT35030-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage; neutral lipid transfer; plasma lipoprotein; atherosolerosois; atherectomy; reverse cholesterol transport; high density lipoprotein; therapy; CETP; familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia; peripheral peripheral vascular disease; hyperchilpoproteinaemia; angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit; LDL; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence specific inhibition of DNA synthesis - by triplex-forming oligo:nucleotide(s), for detection of oncogene mutation(s) and treatment of e.g. HSV, Hepatitis C and Papillomavirus infection.
                                                    HBV; oligodeoxyribonucleotide; homopurine-homopyrimidine target; block; in vitro; DNA synthesis; DNA polymerase; Sequenase3; Taq; Vent; Pol I; accessory replication protein; SSB protein; sequence-specific; triplex-forming oligonucleotide; exon 3; inverted repeat; IR110; hepatitis B virus; P gene; ss.
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                    HPV ORF-Ec target for triplex-forming oligo.
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12; Conservative
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AAT50138-T50359 represent target sequences for the rabbit cholesterol ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT50360-T50546). CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers to the position of the cleavage site in full length CETP. The ribozymes are able to cleave mRNA from the gene encoding CETP, thereby blocking should transport (RCT) pathway can be inhibiting CETP, the reverse cholesterol transport (RCT) pathway can be inhibited (or eliminated) thereby preventing the reduction in size density of the high density lipoproteins (HDL), prolonging HDL half life, and therefore increasing HDL levels. The ribozymes can be used to treat conditions associated with apperchalegerolaemia, peripheral vascular disease, dyelipidaemia, hyperhotalipoproteinaemia, hypoalphalipoproteinaemia, vascular complications of diabetes, transplant, atherecomy and angioplastic restenosis. By inhibiting CETP, the levels of HDL and low density lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a cestenosis. By inhibiting CETP, the levels of cutdy genetic drift and mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes transplant can also be used diagnostically to study genetic drift and mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA useful for preventing or treating initial development, progression or regression of vascular diseases, esp. familial hypercholesterolaemia.
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                                                                                                                                                                                                                                                                                                                                           Stinchcomb D, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 4; Page 41; 72pp; English.
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                                                                     95WO-US016000.
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                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC.
(WARN ) WARNER LAMBERT CO.
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04-JUL-1996.
                                                                                                                                                                                                                                                                                                                                               Couture L,
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reverse cholesterol transport; high density lipoprotein; therapy; CETP; familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia; peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor; angloplastic restenosis; low density lipoprotein; diabetes; HDL; human;

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AATS0138-T50359 represent target sequences for the rabbit cholesterol ester transfer protein (CETP) hammerhead (HH) ribozymes (see AATS0360-T50560, CETP is a 74 kb glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers to the position of the cleavage site in full length CETP. The ribozyme chan binds to 5 nucleotides either side of this site. The ribozyme are able to cleave mWA from the gene encoding CETP, thereby blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the reverse cholesterol transport (RCT) pathway can be inhibited (or eliminated) thereby preventing the reduction in size density of the high density lipoproteins (HDL), prolonging HDL half life, and therefore increasing HDL levels. The ribozymes can be used to treat conditions associated with abnormal levels of CETP, specifically atherosclerosis, familial hypercholesterolaemia, peripheral vascular disease, dyslipidaemia, hypercholesterolaemia, peripheral vascular disease, dyslipidaemia, hyperbealipoproteinaemia, hypoalphalipoproteinaemia, and her HDL.LDL ratio are favourably altered (a ceptenosis in INL levels in the levels of HDL pare favourably altered (a ceptenosis in INL levels)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    decrease in LDL levels, and a corresponding increase in HDL levels). The HH ribozymes can also be used diagnostically to study genetic drift and mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes target specific regions of the CETP gene, they have low non-specific
angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit;
                                                                                                                                                                                                                                                                                                                                                                                                                                  New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA useful for preventing or treating initial development, progression or regression of vascular diseases, esp. familial hypercholesterolaemia.
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                                                                                                                                                                                                                                                                                                                                                   Pape 1
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                                                                                                                                                                                                                                                                                                                                                   Couture L, Stinchcomb D, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; Page 40; 72pp; English.
                                                                                                                                                                                                                                         94US-00363240.
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UUGACCUCCAGAUC 14
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                                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHARM (WARN ) WARNER LAMBERT
                                                                 Oryctolagus cuniculus
                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1996-321852/32.
                                                                                                                                                                                             11-DEC-1995;
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                                                                                                                                                   04-JUL-1996
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New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -useful for preventing or treating initial development, progression or regression of vascular diseases, esp. familial hypercholesterolaemia.

Bisgaier C,

Couture L, Stinchcomb D, Mcswiggen J,

WPI; 1996-321852/32.

(RIBO-) RIBOZYME PHARM INC. (WARN) WARNER LAMBERT CO.

95WO-US016000. 94US-00363240.

11-DEC-1995;

23-DEC-1994;

Homo sapiens

WO9620279-A1

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ANA ANA 9608-T49863 represent target sequences for the human cholesterol cster transfer protein (CETP) hammerhead (HH) ribozymes (see AAT49881-CET 50137). CETP is a 74 KD Glycoprotein that facilitates neutral lipid to the bosition of the cleavage site in full length CETP. The ribozyme crot to the position of the cleavage site in full length CETP. The ribozyme crot binds to 5 nucleotides either side of this site, provided the sequence UH is immediately upstream. The ribozymes are able to cleave mRNA from the crot simmediately upstream. The ribozymes are able to cleave mRNA from the crot simmediately upstream. The ribozymes are able to cleave mRNA from the crot is immediately upstream. The ribozymes and/or expression of the can be inhibited (or eliminated) thereby preventing the reduction in size density of the high density lipoproteins (HDL), prolonging HDL half life, and therefore increasing HDL levels. The ribozymes and be used to treat conditions associated with abnormal levels of CETP, specifically familial hypercholesteroloesterolemmia, hyposlaphalipoproteina was understood of censity lipoproteins of diabetes, transplant, atherectory and angioplastic restenosis. By inhibiting CETP, the levels of HDL and Low conditions can also be used diagnostically to study genetic drift cribozymes target specific regions of the CETP gene, they have low non-confice argeting procedure of the CETP gene, they have low non-confice arget specific activity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; Page 29; 72pp; English.
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Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage; neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;

Human CETP HH ribozyme target sequence #550.

(first entry)

XXXXXXXXXXXXXX

AAT49643 standard; RNA; 15

AAT49643;

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AAT50138-T50359 represent target sequences for the rabbit cholesterol ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT50360-T50546). CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers to the position of the clavage site in full length CETP. The ribozyme then binds to 5 nucleotides either side of this site. The ribozyme able to cleave mRNA from the gene encoding CETP, thereby blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the reverse cholesterol transport (RCT) pathway can be inhibited (or eliminated) thereby preventing the reduction in size density of the high density lipoproteins (HDL), prolonging HDL half life, and therefore increasing HDL levels. The ribozymes can be used to treat conditions associated with abnormal levels of CETP, specifically atherosolerosis, familial.
Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage; neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy; reverse cholesterol transport; high density lipoprotein; therapy; CETP; familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia; peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor; angloplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit; LDL; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA useful for preventing or treating initial development, progression or regression of vascular diseases, esp. familial hypercholesterolaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                        Stinchcomb D, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 4; Page 40; 72pp; English.
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                                                                                                                                                                       Oryctolagus cuniculus.
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Раре

Bisgaier C,

hypercholesterolaemia, peripheral vascular disease, dyslipidaemia, hypercholesterolaemia, peripheral vascular disease, dyslipidaemia, hypercholesterolaemia, vascular complications of diabetees, transplant, atherectomy and angioplastic restenosis. By inhibiting CETP, the levels of HDL and low density lipoproteins (DDL), and the HDL:LDL ratio are favourably altered (a decrease in LDL levels, and a corresponding increase in HDL levels). The HH ribozymes can also be used diagnostically to study genetic drift and mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes target specific regions of the CETP gene, they have low non-specific

Sequence 15 BP; 4 A; 5 C; 2 G; 0 T; 4 U; 0 Other;

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Gaps
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0.5%; Score 10.8; DB 1; Length 15;
llarity 57.1%; Pred. No. 9e+02;
Conservative 4; Mismatches 2; Indels
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               Best Local Similarity
Matches 8; Conserv
     Query Match
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1132 TTCACCTCCAGCTC 1145 UUGACCUCCAGAUC 14

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AATS0179 standard; RNA; 15 BP AAT50179; RESULT 1536 AATS0179 ID AATS XX AC AATS XX

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AATS0138-T50359 represent target sequences for the rabbit cholesterol cester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT50360-CTP is a 74 kD glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers to the position of the cleavage sither in full length CETP. The ribozyme are able to cleave mRNA from the gene encoding CETP, thereby blocking cynthesis and/or expression of the mRNA. By inhibiting CETP, the reverse cholesterol transport (RCT) pathway can be inhibited (or eliminated) thereby preventing the reduction in size density of the high density conclusions (HDL), prolonging HDL half life, and therefore increasing HDL levels. The ribozymes can be used to treat conditions associated with abnormal levels of CETP, specifically atherosclerosis, familial compulsations of diabetes, transplant, atherosclerosis, familial hyperchelesterolaemia, hypoalphalipoproteinaemia, vascular compulsations of diabetes, transplant, atherectomy and angioplastic restenosis. By inhibiting CETP, the levels of HDL and low density compulsations (LDL), and the HDL:LDL ratio are favourably altered (a decrease in LDL), and a corresponding increase in HDL levels). The HT ribozymes can also be used diagnostically to study genetic drift and materions in diseased cells, and to detect CETP mRNA. As the HH ribozymes can also be used diagnostically to study genetic drift and reference transplat specific
                                                                                                    neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy; reverse cholesterol transport; high density lipoprotein; therapy; CETF; familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia; peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor; angloplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit;
                                                                                   cholesterol ester transfer protein; mRNA cleavage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -
useful for preventing or treating initial development, progression or
regression of vascular diseases, esp. familial hypercholesterolaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Couture L, Stinchcomb D, Mcswiggen J, Bisgaier C,
                                        Rabbit CETP HH ribozyme target sequence #372.
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(WARN ) WARNER LAMBERT CO.
(first entry)
                                                                                                                                                                                                                                                                 Oryctolagus cuniculus.
                                                                                     Hammerhead ribozyme;
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07-MAR-1997
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Gaps .. Query Match

0.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 57.1%; Pred. No. 9e+02;
Matches 8; Conservative 4; Mismatches 2; Indels

Sequence 15 BP; 4 A; 5 C; 2 G; 0 T; 4 U; 0 Other;

activity

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1132 TTCACCTCCAGCTC 1145 1 UUGACCUCCAGAUC 14 a ò

ВЪ. AAT90241 standard; DNA; 15 RESULT 1537 AAT90241/c ID AAT90241

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The present sequence is a 5-methyl-2'-deoxycytidine/5-(1-propynyl)-
2'deoxyuzidine modified triplex forming oligonucleotide, comprising nucleomonomer analogues of cytosine and uridine contraining an unsaturated group in the pyrimidine ring. The 5-substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primars for specific RNA or DNA. (Updated on 25-NAR-2003 to correct PF field.)
                                                                                                                      Modification; triplex; duplex; nucleomonomer analogue; unsaturated group; pyrimidine ring; inhibition; gene expression; antisense; therapy; research; diagnosis; probe; primer; ss.
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//ore= "all C are 5-methyl-2'-deoxycytidine all U are 5-
(1.propynyl)-2'-deoxyuridine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
                                                                               Pyrimidine ring modified triplex forming oligonucleotide ON-3.
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                                                                                                                                                                                                                                                     Location/Qualifiers
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92US-00935444.
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                    (revised)
(first entry)
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modified_base
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25-AUG-1992;
23-OCT-1992;
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03-DEC-1997
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                                                                                                                                                                                                                                                                                                Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
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                                                                                                                            Pyrimidine ring modified triplex forming oligonucleotide ON-6.
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0.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 9e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
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92US-00935444.
92US-00965941.
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                                                                 (revised)
(first entry)
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modified_base
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AAT90238/c
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unsaturated group;

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Modification; triplex; duplex; nucleomonomer analogue; unsaturate pyrimidine ring; inhibition; gene expression; antisense; therapy; research; diagnosis; probe; primer; ss.
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92US-00935444.
92US-00965941.
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Best Local Similarity
Matches 12; Conserv
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modified_base
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03-DEC-1997
                                                                                                                                                                                                                            26-NOV-1991;
                                                                                                                                                                                                                                      25-AUG-1992;
                                                                                                                                                                                                                                                                                                   Froehler B,
                                                                                                                                                    US5645985-A
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                                                   Synthetic
                                                                                                                                                                                                                                                                                                               Wagner R;
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                                                  Modification; triplex; duplex; nucleomonomer analogue; unsaturated group; pyrimidine ring; inhibition; gene expression; antisense; therapy; research; diagnosis; probe; primer; 85.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is a 5-(1-propynyl)-2'-deoxycytidine modified triplex forming oligonucleotide, comprising nucleomonomer analogues of suptosine containing an unsaturated group in the pyrimidine ring. The 5-substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                    Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
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                                                                                                                                       1. 15
/*tag= a
/note= "all C are 5-(1-propynyl)-2'-deoxycytidine"
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                           Pyrimidine ring modified triplex forming oligonucleotide ON-4.
                                                                                                                                                                                                                                                                                                                                         Jones RJ, Gutierrez AJ, Matteucci M, Pudlo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
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                                                                                                                           Location/Qualifiers
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92US-00935444.
92US-00965941.
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ID AAT90237 standard; DNA; 15
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(first entry)
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     (first entry)
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es 12; Conserv
                                                                                                                            Key
modified_base
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03-DEC-1997
     03-DEC-1997
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                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                      Wagner R;
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/note= "all C are 5-methyl-2'-deoxycytidine all U are 5-
(1-propynyl)-2'-deoxyuridine"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matteucci M, Pudlo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 15 BP; 0 A; 5 C; 0 G; 5 T; 5 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gutierrez AJ,
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Location/Qualifiers
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Modification; triplex, duplex; nucleomonomer analogue; unsaturated group; pyrimidine ring; inhibition; gene expression; antisense; therapy; research; diagnosis; probe; primer; ss.
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/note= "all C are 5-(1-propynyl)-2'-deoxycytidine"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jones RJ, Gutierrez AJ, Matteucci M, Pudlo J;
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(first entry)
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Matches 12; Conservative
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Wagner R;
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23-OCT-1992;
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03-DEC-1997
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85.7%; Pred. No. 9e+02;
ive 0; Mismatches 2; Indels
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research; diagnosis; probe; primer; ss
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AAT90273 standard; DNA; 15
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1es 12; Conservative
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23-OCT-1992;
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                                                                              Synthetic
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Query Match

ઠ 셤 RESULT 1542

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Query Match
Best Local S:
Matches 12
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                                                                                                                                                                                                                                                                                         The present sequence is a 5-methyl-2'-deoxycytidine/5-(1-propynyl)-2'deoxyuridine modified triplex forming oligomuclectide, comprising nucleomonomer analogues of cytosine and uridine containing an unsaturated group in the pyrimidine ring. The 5-substitutent provides enhanced binding capacity in the primidine fungiones and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance call permearion and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Modification, triplex, duplex, nucleomonomer analogue, unsaturated group, pyrimidine ring, inhibition, gene expression, antisense, therapy, research, diagnosis, probe, primer, ss.
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/note= "all C are 5-methyl-2'-deoxycytidine all U are 5-
(1-propynyl)-2'-deoxyuridine"
                                                                                                                                                                                                                             Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pyrimidine ring modified triplex forming oligonucleotide ON-25.
                                                                                                                                                                   Froehler B, Jones RJ, Gutierrez AJ, Matteucci M, Pudlo J;
Wagner R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 0 A; 5 C; 0 G; 0 T; 10 U; 0 Other;
                                                                                                                                                                                                                                                                            Example 17; Col 115-116; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT90259 standard; DNA; 15 BP
                                                                                                                     92US-00935444.
92US-00965941.
                                                                                                           91US-00799824.
                                                                                     92US-00976103.
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(first entry)
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                                                                                                                                                      (GILE-) GILEAD SCI INC.
                                                                                                                                                                                                            WPI; 1997-362920/33.
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modified_base
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03-DEC-1997
                                                                                       25-NOV-1992;
                                                                                                            26-NOV-1991;
                                                                                                                        25-AUG-1992;
23-OCT-1992;
                                            US5645985-A
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AAT90259/c
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The present sequence is a 5-methyl-2'-deoxycytidine/5-(1-propynyl)-2'deoxyuridine modified triplex forming oligonucleotide, comprising nucleomonomer analogues of cytosine and uridine containing an unsaturated group in the pyrimidine ring. The 5-substituted provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jones RJ, Gutierrez AJ, Matteucci M, Pudlo J;
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/note= "3'-thioformacetal linkage"
                                                          /*tag= b
/note= "3'-thioformacetal linkage"
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(1-propynyl)-2'-deoxyuridine'
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92US-00935444.
92US-00965941.
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/*tag= (
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03-DEC-1997
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23-OCT-1992;
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Wagner R;
                                        misc_feature
                                                                                                                                 misc_feature
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The present sequence is a 5-methyl-2'-deoxycytidine/5-(1-propynyl)-2'deoxyuridine modified triplex forming oligonucleotide, comprising nucleomonomer analogues of cytosine and uridine containing an unsaturated group in the pyrimidine ring. The 5-substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
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/*tag= a
/note= "all C are 5-methyl-2'-deoxycytidine all U
(1-propynyl)-2'-deoxyuridine"
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Wagner R;
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/*tag= a
/note= "all C are 5-(1-propynyl)-2'-0-
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92US-00935444.
92US-00965941.
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Best Local Similarity 85.7'
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                               (GILE-) GILEAD SCI INC.
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25-AUG-1992;
23-OCT-1992;
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                                 /trag= a/trag= a/locare 5-methyl-2'-deoxycytidine all U are 5-(2-pyridinyl)-2'-deoxyuridine"
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Wagner R;
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         location/Qualifiers
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92US-00935444.
92US-00965941.
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(first entry)
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modified_base
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         Key
modified_base
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25-AUG-1992;
23-OCT-1992;
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03-DEC-1997
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AAT90240/C
XX
AC AAT9024(
AC AAT9024(
AC 25-MAR-2
DT 25-MAR-2
DT 35-DEC-1
DX B Pyrimid
XX
C Modific
KW Pyrimid
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The present sequence is a 5-(1-propynyl)-2'-O-allyldeoxycytidine modified triplex forming oligonucleotide, comprising nucleomonmer analogues of sytosine containing an unsaturated group in the pyrimidine ring. The 5-dubstituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense condiguration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
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/*tag= a
/note= "all C are 5-(2-pyridinyl)-2'-deoxycytidine"
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                                                                                                                                                                                                                                   Jones RJ, Gutierrez AJ, Matteucci M, Pudlo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
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9e+02;
hes 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                       Example 18; Col 129-130; 104pp; English.
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 allyldeoxycytidine"
                                                                                                                               91US-00799824.
92US-00935444.
92US-00965941.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT90263 standard; DNA; 15 BP.
                                                                                                  92US-00976103.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (revised)
(first entry)
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                                                                                                                                                                                                  (GILE-) GILEAD SCI INC.
                                                                                                                                                                                                                                                                                      WPI; 1997-362920/33.
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modified_base
                                                                                                                             26-NOV-1991;
25-AUG-1992;
23-OCT-1992;
                                                                                                25-NOV-1992;
                                                                                                                                                                                                                                 Froehler B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAR-2003
03-DEC-1997
                                                                 08-JUL-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                      Wagner R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT90263;
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The present sequence is a 5-(2-pryridinyl)-2'-deoxycytidine modified triplex forming oligonucleotide, comprising nucleomonomer analogues of suptraine containing an unsaturated group in the pyrimidine ring. The 5-substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA, (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modification; triplex; duplex; nucleomonomer analogue; unsaturated group; pyrimidine ring; inhibition; gene expression; antisense; therapy; research; diagnosis; probe; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= a
/note= "all C are 5-(1-propynyl)-2'-deoxycytidine all U
are 5-(1-propynyl)-2'-deoxyuridine"
                                                                                                                                                                                                                                                    Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pyrimidine ring modified triplex forming oligonucleotide ON-10.
                                                                                                                                                                  Froehler B, Jones RJ, Gutierrez AJ, Matteucci M, Pudlo J;
Wagner R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                      Example 16; Col 109-110; 104pp; English.
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                                 92US-00976103.
                                                                  91US-00799824.
                                                                                 92US-00935444.
92US-00965941.
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(first entry)
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                                                                                                                                   (GILE-) GILEAD SCI INC.
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modified_base
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03-DEC-1997
                               25-NOV-1992;
                                                                26-NOV-1991;
                                                                                 25-AUG-1992;
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08-JUL-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT90243;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1549
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The present sequence is a 5-methyl-2'-deoxycytidine/5-(1-propynyl)-2'deoxyuridine modified triplex forming oligonucleotide, comprising uncleomnomer analogues of cytosine and utidine containing an unsaturated group in the pyrimidine ring. The 5-substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PP field.)
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                                                                                                                                                                                                                  Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
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                                                                                                          Gutierrez AJ, Matteucci M, Pudlo J;
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/note= "all C are 5-methyl-2'-deoxycytidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 0 A; 5 C; 0 G; 5 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                              Example 18; Col 123-124; 104pp; English,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91US-00799824.
92US-00935444.
92US-00965941.
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92US-00935444.
92US-00965941.
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ID AAT90236 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15 AAAAAGAGAGAGAG 2
                                                                  (GILE-) GILEAD SCI INC.
                                                                                                            Jones RJ,
                                                                                                                                                                            WPI; 1997-362920/33.
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modified_base
  25-AUG-1992;
23-OCT-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-NOV-1992;
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03-DEC-1997
                                                                                                            Froehler B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US5645985-A.
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23-OCT-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAT90236;
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                                                                                                                                    Wagner R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1551
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                                                                                                                                                                                                                                                                                                                                                                                       The present sequence is a 5-(1-propynyl)-2'-deoxycytidine/5-(1-propynyl)-2'-deoxycytidine modified triplex forming oligonucleotide, comprising nucleomonomer analogues of cytosine containing an unsaturated group in the pyrimidine ring. The 5-substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological ph conditions. The lipophilic groups can also enhance cell permeation and upteake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal coligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modification, triplex, duplex, nucleomonomer analogue, unsaturated group, pyrimidine ring, inhibition, gene expression, antisense, therapy; research, diagnosis, probe, primer, ss.

    1. 15
    /*tag= a
    /note= "all C are 5-methyl-2'-deoxycytidine all U are 5-

                                                                                                                                                                                                                                                                    Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
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                                                                                                                                                            Gutierrez AJ, Matteucci M, Pudlo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 0 A; 5 C; 0 G; 0 T; 10 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                         Example 6; Col 67-68; 104pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                       91US-00799824.
92US-00935444.
92US-00965941.
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(first entry)
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                                                                                                                                                       Froehler B, Jones RJ,
Wagner R;
                                                                                                            (GILE-) GILEAD SCI INC.
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modified_base
                          26-NOV-1991;
                                               25-AUG-1992;
23-OCT-1992;
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03-DEC-1997
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AAT90270;

RESULT 1550

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92US-00935444
92US-00965941
                                                                        Jones RJ,
                                            (GILE-) GILEAD SCI INC.
                                                                                                                     WPI; 1997-362920/33.
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Best Local Similarity
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modified_base
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25-AUG-1992;
23-OCT-1992;
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25-AUG-1992;
23-OCT-1992;
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                                                                        Froehler B,
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03-DEC-1997
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                                                                                     Wagner R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1553
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Matches
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                                                                                                                                                                                     The present sequence is a 5-methyl-2'-deoxycytidine modified triplex forming oligonucleotide, comprising nucleomonomer analogues of cytosine containing an unsaturated group in the pyrimidiane ring. The 5-substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes at triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Modification; triplex; duplex; nucleomonomer analogue; unsaturated group; pyrimidine ring; inhibition; gene expression; antisense; therapy; research; diagnosis; probe; primer; ss.
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                                                                                                     Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                              Matteucci M, Pudlo J;
                                                                                                                                                                                                                                                                                                                                                                                                                 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; 7ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (1-propynyl) -2'-deoxyuridine"
11. .12
/*tag= b
/note= "formacetal linkage"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                '*tag= c
'note= "formacetal linkage"
                                 Gutierrez AJ,
                                                                                                                                                                 Example 2; Col 53-54; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
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/note= "all C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
(first entry)
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/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                                  12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15 AAAAAGAGAGAGAG
                      Froehler B, Jones RJ,
Wagner R;
   (GILE-) GILEAD SCI INC
                                                                        WPI; 1997-362920/33.
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
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03-DEC-1997
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AAT90260/c
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The present sequence is a 5-methyl-2'-deoxycytidine/5-(1-propynyl)-2'deoxyuridine modified triplex forming oligonuclectide, comprising nucleomonomer analogues of cytosine and uridine containing an unsaturated sproup in the pyrimidine ring. The substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapoutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
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(3-methyl-1-butynyl)uracil"
                                                                                                                                                                           Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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Matteucci M, Pudlo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 0 A; 5 C; 0 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                   Example 15; Col 103-104; 104pp; English
       Gutierrez AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
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92US-00935444.
92US-00965941.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
(first entry)
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Pudlo J;

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The present sequence is a 5-methyl-2'-deoxycytidine/5-(3-methyl-1-butpyl) luxacil modified triplex forming oligonocleotide, comprising nucleomonomer analogues of cytosine and uridine containing an unsaturated group in the pyrimidine ring The 5-substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance call permetation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
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                                                                                                                                                                                                                                                         Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
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/note= "all C are 5-methyl-2'-deoxycytidine all U are
(1-propynyl)-2'-deoxyuridine"
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85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels
                                                                                                    Gutierrez AJ, Matteucci M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 0 A; 5 C; 0 G; 5 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                      Example 5; Col 65-66; 104pp; English.
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92US-00935444.
92US-00965941.
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Best Local Similarity 85.75
Marches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 AAAAAGAGAGAG 2
                                  (GILE-) GILEAD SCI INC.
                                                                                                 Jones RJ,
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                                                                                                                                                                                              WPI; 1997-362920/33
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modified_base
                                                                                             Froehler B,
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23-OCT-1992;
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                                                                                                                                   Wagner R;
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AAT90257/c
XX PERXEX SYNTHE SYNTHES SYNTH
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//ore= "all C are 5-methyl-2'-deoxycytidine all U are 5-
(2-thienyl)-2'-deoxyuridine"
                                                                                        Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
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0.5%; Score 10.8; DB 1; Length 15;
Local Similarity 85.7%; Pred. No. 9e+02;
les 12; Conservative 0; Mismatches 2; Indels
                 Pudlo
               Matteucci M,
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                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 0 A; 5 C; 0 G; 6 T; 4 U; 0 Other;
                                                                                                                                                           Example 15, Col 99-100; 104pp; English,
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               Gutierrez AJ,
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92US-00935444.
92US-00965941.
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               Jones RJ,
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                                                           WPI; 1997-362920/33.
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modified_base
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25-AUG-1992;
23-OCT-1992;
           Froehler B,
Wagner R;
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03-DEC-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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Matches
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WPI; 1997-362920/33.
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modified_base
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03-DEC-1997
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23-OCT-1992;
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  Wagner R;
                                                                                                                                                                                                                                                                                                                                                                                                                AAT90272;
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                                                                                                                                                                                                                                                                                                                                                                      RESULT 1557
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                                                                                                    The present sequence is a 5-methyl-2'-deoxycytidine/5-(2-thienyl)-deoxycytidine modified triplex forming oligonuclecties, comprising nucleomonomer analogues of cytosine and uridine containing an unsaturated group in the pyrimidine ring. The 5-substituent provides enhanced binding double the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
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                                        Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
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/*tag= b
/note= "all U are 5-methyl-2'-0-allyluridine"
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'note= "all C are 5-methyl-2'-deoxycytidine"
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                                                                                                                                                                                                                                                                                              2; Indels
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                                                                                                                                                                                                                                                      Sequence 15 BP; 0 A; 5 C; 0 G; 5 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                         Score 10.8; DB 1
Pred. No. 9e+02;
0; Mismatches
                                                                                  Example 16; Col 113-114; 104pp; English.
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92US-00935444.
92US-00965941.
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                                                                                                                                                                                                                                                                          o.5%;
Similarity 85.7%;
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                                                                                                                                                                                                                                                                                              12; Conservative
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*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
                    WPI; 1997-362920/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
modified base
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03-DEC-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Froehler B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
 Wagner R;
                                                                                                                                                                                                                                                                                                                                                                                                               AAT90269;
                                                                                                                                                                                                                                                                          Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                      RESULT 1556
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The present sequence is a 5-methyl-2'-deoxycytidine/5-methyl-2'-0-
allyluridine modified triplex forming oligonucleotide, comprising
uncleodnomer analogues of cytosine and uridine containing an unsaturated
group in the pyrimidine ring. The 5-substituent provides enhanced binding
capacity in the formation of duplexes and triplexes with single and
double stranded RNA and DNA. Triplexes can be formed at pH 7.0, 1 e.
under physiological pH conditions. The lipophilic groups can also enhance
cell permeation and uptake. The oligomer, which also shows enhanced
nuclease resistance, can be used to form duplexes and triplexes as a
normal oligomer, to inhibit gene expression, e.g. by its antisense
configuration, for therapeutic or research purposes, and for diagnosis by
providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-
2003 to correct PF field.)
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Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
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/note= "all C are 5-methyl-2'-0- allyldeoxycytidine"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pyrimidine ring modified triplex forming oligonucleotide ON-38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pudlo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Seguence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.5%; Score 10.8; DB 1
Best Local Similarity 85.7%; Pred. No. 9e+02;
Matches 12; Conservative 0; Mismatches
                                                                                                                                            Example 18; Col 121-122; 104pp; English.
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(first entry)
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*tag=
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WPI; 1997-362920/33.
   Wagner R;
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                                                                       The present sequence is a 5-methyl-2'-O-allyldeoxycytidine modified cytoplace forming alignucleotide, comprising nucleomonomer analogues of cytosine containing an unsaturated group in the pyrimidine ring. The 5-substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7
          Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
                                                                                                                                                                                                                                                                  Gaps
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hoote= "all C are 5-methyl-2'-deoxycytidine all U
(1-propynyl)-2'-deoxyuridine"
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Pyrimidine ring modified triplex forming oligonucleotide ON-24.
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                                                                                                                                                                                                                                         0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matteucci M,
                                                                                                                                                                                                                     Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= c
/note= "3'-thioformacetal linkage"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                *tag= b
'note= "3'-thioformacetal linkage"
                                                    Example 18; Col 127-128; 104pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gutierrez AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                AAT90258 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92US-00976103
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92US-00965941
                                                                                                                                                                                                                                                                                     1016 AAAAAGAGGGGAG 1029
                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                  Query Match
Best Local Similarity 85.7%
---Ahes 12; Conservative
                                                                                                                                                                                                                                                                                                          15 AAAAAGAGAGAGAG 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SCI INC.
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modified_base
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03-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
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23-OCT-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JUL-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                      AAT90258;
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The present sequence is a 5-methyl-2'-deoxycytidine/5-(1-propynyl)-2'deoxyuridine modified triplex forming oligonucleotide, comprising nucleomnomer analogues of cytosine and uxidine containing an unsaturated group in the pyrimidine ring. The 5-substituted provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a narmal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
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/note= "all C are 5-methyl-2'-deoxycytidine all U are 5-
(2-pyridinyl)-2'-deoxyuridine"
Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; 2; Indels ive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                                                                                                              Example 15; Col 99-100; 104pp; English.
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(first entry)
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/*tag=
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Best Local Similarity
Matches 12; Conserva
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25-AUG-1992;
23-OCT-1992;
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Wagner R;
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03-DEC-1997
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AAT90261/c
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WPI; 1997-362920/33
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The present sequence is a 5-methyl-2'-deoxycytidine/5-(2-pyridinyl)-2'deoxyuridine modified triplex forming oligonucleotide, comprising nucleomnomer analogues of cytosine and uridine containing an unsaturated group in the pyrimidine ring. The 5-substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic groups can also enhance cell permeation and uptake. The oligomer, which also shows enhanced nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapeutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)
Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 0 A; 5 C; 0 G; 5 T; 5 U; 0 Other;
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. 0 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; 7ative 0; Mismatches 2; Indels 1016 AAAAAGAGGGGAG 1029 Best Local Similarity 85.7 Matches 12; Conservative Query Match ò

Modification; triplex; duplex; nucleomonomer analogue; unsaturated pyrimidine ring; inhibition; gene expression; antisense; therapy; research; diagnosis; probe; primer; ss. Pyrimidine ring modified triplex forming oligonucleotide ON-37. ВЪ AAT90271 standard; DNA; 15 (first entry) AAAAAGAGAGAG 2 (revised) 25-MAR-2003 03-DEC-1997 15 AAT90271; RESULT 1560 g

Location/Qualifiers ...15 /*tag= Key modified_base Synthetic

US5645985-A

08-JUL-1997

92US-00976103

25~NOV-1992;

91US-00799824 92US-00935444 92US-00965941 26-NOV-1991; 25-AUG-1992; 23-OCT-1992;

GILE-) GILEAD

Pudlo J; Matteucci M, Gutierrez AJ, Jones RJ, Froehler B, Wagner R;

WPI; 1997-362920/33

Nucleo:monomers containing unsaturated pyrimidine base analogues - form oligomer duplexes or triplexes with nucleic acid under physiological conditions, and used in gene expression inhibition, diagnosis and assay.

Example 18; Col 125-126; 104pp; English.

The present sequence is a 5-methyl-2'-deoxycytidine/5-(1-propynyl)-2'-0-allyldeoxyuridine modified triplex forming oligonucleotide, comprising mucleomnomer analogues of cytosine and uridine containing an unsaturated group in the pyrimidine ring. The 5-substituent provides enhanced binding capacity in the formation of duplexes and triplexes with single and double stranded RNA and DNA. Triplexes can be formed at pH 7.0, i.e. can be stranded RNA and DNA. Triplexes can be formed at pB 3.0, i.e. call permeation and uptake. The oligomer, which also shows enhance nuclease resistance, can be used to form duplexes and triplexes as a normal oligomer, to inhibit gene expression, e.g. by its antisense configuration, for therapoutic or research purposes, and for diagnosis by providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-2003 to correct PF field.)

Sequence 15 BP; 0 A; 5 C; 0 G; 5 T; 5 U; 0 Other;

Gaps . 0 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels Local Similarity 85.7 ses 12; Conservative Query Match Matches

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Gaps

RESULT 1561

AAX75726 standard; RNA; 15 BP. AAX75726; Human flt-1 and KDR hammerhead ribozyme target site #60.

(first entry)

28-JUL-1999

Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-1; keyrosine kinase 1; kinase insert domain containing receptor; fms-like tyrosine ki foetal liver kinase

Homo sapiens

droz5

WO9715662-A2

01-MAY-1997.

95US-0005974P. 25-OCT-1996; 26-OCT-1995; 11-JAN-1996;

(RIBO-) RIBOZYME PHARM INC. (CHIR) CHIRON CORP.

Mcswiggen J, Pavco P,

Escobedo J; Stinchcomb D, WPI; 1997-259017/23. Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.

Example 9; Page 191; 218pp; English.

The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more

schultz451-1.rng

Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels Seguence 15 BP; 6 A; 2 C; 6 G; 0 T; 1 U; 0 Other;

1164 CIGICCCAACTITG 1177 15 CTCTCCCGACTTG 2 à g

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Gaps

0,

AAX36646 standard; RNA; 15 RESULT 1562 AAX36646

BP.

(first entry) 13-JUL-1999 AAX36646;

Antisense oligomer SEQ ID NO. 49.

Antisense oligonucleotide, gene expression inhibitor; diagnosis; oligonucleotide-based therapy; ss.

Synthetic.

JS5830653-A

03-NOV-1998

95US-00473481. 07-JUN-1995; 91US-00799824. 92US-00935444. 92US-00965941. 92US-00976103. 26-NOV-1991; 25-AUG-1992; 23-OCT-1992; 25-NOV-1992;

(GILE-) GILEAD SCI INC.

Froehler B, Gutierrez AJ, Jones RJ, Matteucci M, Pudlo Wagner R;

Screening of anti-sense oligo:nucleotide(s) for ability to inhibit gene expression - comprises micro-injecting varying amounts of the anti-sense oligomer into a host cell and measuring expression of the target and control genes. WPI; 1998-609233/51.

Example 18; Col 52; 104pp; English.

This sequence represents an antisense oligonucleotide used to test the method of the invention. The method of the invention is for evaluation of an antisense oligomer for its ability to inhibit gene expression, and comprises: microinjecting varying amounts of the antisense oligomer into a host cell along with a target vector for the expression of a gene containing a target sequence for the antisense oligomer and a control vector for the expression of a control gene that encodes a detectable protein and does not contain the target sequence; and measuring expression of the target gene and the control gene. Increasing inhibition of the target gene and the control gene expression, as the amount of antisense oligomer increases indicates the ability of the antisense oligomer increases indicates the ability of the antisense oligomer tho inhibit gene expression. The method is used in oligonucleotide-based therapy and diagnosis. The oligomers have enhanced

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affinity for complementary target nucleic acid sequences and improved binding affinity for double-stranded and/or single-stranded target
                                                                                                                                                    Gaps
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                                                                                                                                                      2; Indels
                                                                                                             Query Match
0.5%; Score 10.8; DB 1; Length
Best Local Similarity 85.7%; Pred. No. 9e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                           Sequence 15 BP; 10 A; 0 C; 5 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                             1016 AAAAAGAGGGGAG 1029
                                                                                                                                                                                                                             1 AAAAAGAGAGAGAG 14
                                            sednences
      8 x 3 3 3 3
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BP. i643/c AAX36643 standard; DNA; 15

RESULT 1563 AAX36643/c

(first entry) 13-JUL-1999

AAX36643;

Antisense oligomer SEQ ID NO. 40.

Antisense oligonucleotide, gene expression inhibitor, diagnosis; oligonucleotide-based therapy; ss.

Synthetic.

U95830653-A.

03-NOV-1998

95US-00473481. 07-JUN-1995;

91US-00799824. 92US-00935444. 92US-00965941. 92US-00976103. 26-NOV-1991; 25-AUG-1992; 23-OCT-1992; 25-NOV-1992;

(GILE-) GILEAD SCI INC.

Pudlo Froehler B, Gutierrez AJ, Jones RJ, Matteucci M, Wagner R;

WPI; 1998-609233/51.

Screening of anti-sense oligo:nucleotide(s) for ability to inhibit gene expression - comprises micro-injecting varying amounts of the anti-sense oligomer into a host cell and measuring expression of the target and control genes.

Example 17; Col 51; 104pp; English.

This sequence represents an antisense oligomucleotide used to test the method of the invention. The method of the invention is for evaluation of method of the invention. The method of the invention is for evaluation of an antisense oligomer for its ability to inhibit gene expression, and comprises: microhijecting varying amounts of the antisense oligomer into a host cell along with a target vector for the expression of a gene containing a target sequence for the antisense oligomer into vector for the expression of a control containing a target gene and the target sequence; and measuring to protein and does not contain the target sequence; and measuring of the target gene expression, but not of the control gene expression, of the amount of antisense oligomer increases indicates the ability of the antisense oligomer increases indicates the ability of the oligomucleotide-based therapy and diagnosis. The oligomers have enhanced affinity for complementary target uncleic acid sequences and improved the binding affinity for double-stranded and/or single-stranded target.

G; 10 T; 0 U; 0 Other; Sequence 15 BP; 0 A; 5 C; 0

Gaps ô 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels Query Match Best Local Similarity 85.7% Matches 12, Conservative

1016 AAAAAGAGGGGAG 1029

15 AAAAAGAGAGAGAG 2

Antisense oligomer SEQ ID NO. 12. AAX36634 standard; RNA; 15 13-JUL-1999 AAX36634; RESULT 1564 AAX36634

(first entry)

Antisense oligonucleotide; gene expression inhibitor; diagnosis; oligonucleotide-based therapy; ss.

Synthetic.

03-NOV-1998

95US-00473481. 07-JUN-1995;

92US-00935444. 92US-00965941. 91US-00799824. 25-AUG-1992; 23-OCT-1992; 25-NOV-1992; 26-NOV-1991;

(GILE-) GILEAD

92US-00976103

Pudlo J; Jones RJ, Matteucci M, Gutierrez AJ, Froehler B, Wagner R;

WPI; 1998-609233/51.

Screening of anti-sense oligo:mucleotide(s) for ability to inhibit gene expression - comprises micro-injecting varying amounts of the anti-sense oligomer into a host cell and measuring expression of the target and control genes.

Example 6; Col 40; 104pp; English.

This sequence represents an antisense oligonucleotide used to test the method of the invention is for evaluation of an antisense oligomer for its ability to inhibit gene expression, and comprises: microinjecting varying amounts of the antisense oligomer into a host cell along with a target vector for the expression of a gene containing a target sequence for the antisense oligomer into a vector for the expression of a control gene that encodes a detectable protein and does not contain the target sequence; and measuring expression of the target gene and the control gene. Increasing inhibition of the target gene and the control gene expression, as the amount of antisense oligomer increases indicates the ability of the antisense oligomer to inhibit gene expression. The method is used in oligomer to inhibit gene expression. The method is used in oligomer the indicates the ability of the attinity for complementary target nucleic acid sequences and improved affinity for double-stranded and/or single-stranded target sednences

Sequence 15 BP; 10 A; 0 C; 5 G; 0 T; 0 U; 0 Other;

Gaps · 0 Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels

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AAV40439 standard; DNA; 15 BP.

AAV40439;

28-SEP-1998 (first entry)

TRACER antisense oligonucleotide.

Antisense oligonuclectide, down regulate, erbB-2, oncogene, tyrosine kinase, breast cancer, radioisotope, hybridisation, probe, US-1, US-3; US-4; US-5, UT-1; US-D, SC-3; TRACER, ss.

Synthetic. Homo sapiens.

WO9820168-A1.

14-MAY-1998.

97WO-US020910. 03-NOV-1997;

(UYDU-) UNIV DUKE. 04 - NOV-1996;

Inglehart JD; Marks JR, Vaughn JP,

WPI; 1998-286977/25.

Antisense oligonucleotides that down regulate the erbB-2 oncogene -useful to inhibit BRBB2 tyrosine kinase receptor expression in cancer cells to treat epithelial cell, breast, ovarian, lung or colon cancer.

Example 6; Page 15; 31pp; English.

The antisense oligonucleotides AAV40432-V40439 were used to down regulate the erbb-2 oncogene. This oncogene codes for a 185kD tyrosine kinase the erbb-2 oncogene. This oncogene codes for a 185kD tyrosine kinase conversopressed. The oligonucleotides are able to inhibit the overexpressed the oligonucleotides are able to inhibit the conversation of ERBB2 tyrosine kinase receptor in a cell, which can be overexpression of ERBB2 tyrosine kinase receptor in a cell, which can be overexpression of ERBB2 tyrosine kinase receptor in a cell, which can be come by targeting the antisense oligonucleotides to the erbb-2 oncogene. The colloquicleotides were designated the following names, followed by the colloquicleotides were designated the following names, followed by the colloquicleotides were designated the following names, followed by the corrol in the erbb-2 gene that they target: US-1 (151-165); US-1 (151-

Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;

ö similarity 85.7%; Score 10.8; DB 1; Length 15; Similarity 85.7%; Pred. No. 9e+02; Indels 12; Conservative 0; Mismatches 2; Indels Local Similaricy Query Match Matches

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Gaps

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Ξ Fukui

AAV37811;

RESULT 1566

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single-stranded DNA fragment having a specific nucleic acid sequence in a sample. The method comprises stringently hybridizing a carrier-bonded DNA probe that comprises a single-stranded DNA probe having a carrier-bonded DNA probe that comprises a single-stranded DNA probe having a nucleic acid sequence complementary to the specific nucleic acid sequence of the single-stranded DNA fragment to be detected or quantitatively determined in the sample and a carrier comprising a substance with a very low absorbance for DNA, as bonded together via or without a spacer between them, with DNA fragments in the sample. followed by detecting or carrier-bonded DNA probe. Probes from the present invention are used for detecting point mutations associated with diseases such as cancer. The method is simple and allows very early quantitative diagnoses. The present sequence represents a DNA chain having a K-ras mutant sequence, used in an example from the present invention
       Detection; determination; quantitation; carrier bonded DNA probe;
hybridisation; K-ras; p53; human hepatitis C virus; leukocyte antigen;
mutant; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Use of probe bonded to carrier with low DNA adsorbance - in DNA hybridisation assays for early diagnosis of cancer.
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AAV33235
ID AAV33235 standard; DNA; 15
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(first entry)
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18-NOV-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single-stranded DNA fragment having a specific nucleic acid sequence in a single-stranded DNA fragment having a specific nucleic acid sequence in a sample. The method comprises stringently hybridizing a carrier-bonded DNA probe that comprises a single-stranded DNA probe having a nucleic acid sequence complementary to the specific nucleic acid sequence of the single-stranded DNA fragment to be detected or quantitatively determined in the sample and a carrier comprising a substance with a very low absorbance for DNA, as bonded together via or without a spacer between them, with DNA fragments in the sample, followed by detecting or them, with DNA fragments in the sample, followed by detecting or cuantitatively determining the DNA fragment as hybridised with the carrier-bonded DNA probe. Probes from the present invention are used for detecting point mutations associated with diseases such as cancer. The method is simple and allows very early quantitative diagnoses. The present sequence represents a DNA chain having a K-ras mutant sequence, used in an example from the present invention
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hybridisation; K-ras; p53; human hepatitis C virus; leukocyte antigen;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Use of probe bonded to carrier with low DNA adsorbance - in DNA hybridisation assays for early diagnosis of cancer.
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                                                                                                                                                                                                 K-ras mutant DNA chain SEQ ID NO:26 from EP-843019 Example 9.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 1 A; 2 C; 8 G; 4 T; 0 U; 0 Other;
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ID AAV37811 standard; DNA; 15 BP

XC AAV37811;

XX I1-SEP-1998 (first entry)

XX XX XX DE K-ras mutant DNA chain SEQ ID
                                                                AAV37811 standard; DNA; 15 BP.
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                                                                                                                                                                                                                                                                                              mutant; cancer; ss.
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                                                                                                                                                                                                                                                                                                                                    Synthetic.
Homo sapiens.
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                                                           Gaps
                                                           0
Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wild-type probe used in the method of the invention.
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RESULT

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/*tag= b
/note= "amide group attached to the 3' end when used as a wild-type PNA labelled probe or as wild-type PNA blocker probe; if left unmodified the probe is used as a wild-type DNA labelled probe or as a wild-type DNA blocker probe"
/*tag= a //force= a (fluorescein-Expedite PNA linker)2-lys- group attached at the 5' end when used as a wild-type PNA labelled probe; fluorescein- Fluorodite (RTM) labelling phosphoramidite- group attached at 5' end when used as a wild-type DNA labelled probe; if left unmodified the probe is used as a wild-type PNA blocker probe or as a wild-type DNA blocker probe or as a
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97US-00937709.
97US-00963472.
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Assays for target nucleic acid sequences - using a detectable probe and probes for suppressing the binding to a non-target sequence which may be present in a sample.

Example 6; Page 39; 84pp; English.

The invention provides a method for suppressing the binding of a detectable probe to a non-target sequence in an assay of a sample for a target sequence (TS). The method involves (a) contacting the sample with a set containing two or more probes under conditions suitable for the probes to hybridise to nucleic acid, where, at least one of the probes is a detectable moiety and having a sequence complementary to the TS, and at least one of the other probes of the probe having a sequence complementary to a non-TS which may be present in the sample. The method also specifies that atleast one of the present in the sample. The method also specifies that atleast one of the present in the sample by directly or indirectly quantitating the present in the sample by directly or indirectly quantitating the consense of the detectable probe which hybridised to the TS. In the example given, two DNA target oligonucleotides which differed in the example given, two DNA target oligonucleotides which differed in the sample base (the wild-type DNA (AAV3323) and the mutant of Sequence by a single base (the wild-type DNA (AAV3323) and the mutant of sequence, such as the present sequence, (see AAV33236 and AAV33241.

COURSELIANT OF THE
Seguence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other;

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/note= "amide group attached to the 3' end when used as a
wild-type PNA labelled probe or as wild-type PNA blocker
probe; if left unmodified the probe is used as a wild-
type DNA labelled probe or as a wild-type DNA blocker
probe"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Assays for target nucleic acid sequences - using a detectable probe and probes for suppressing the binding to a non-target sequence which may be present in a sample.
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   Length 15;
                              2; Indels
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Score 10.8; DB 1
Pred. No. 9e+02;
); Mismatches
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97US-00937709.
97US-00963472.
                                                                                                                                                            AAV33235 standard; DNA; 15 BP.
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 Query, Match 0.5
Best Local Similarity 85.7
Matches 12; Conservative
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18-NOV-1998
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Stefano K;
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cc probes to hybridise to nucleic acid, where, at least one of the probes is a detectable wild-type probe labelled with a detectable moiety and having a sequence complementary to the TS, and at least one of the criber probes (also known as a blocker probe) is an unlabelled or independently which may be present in the sample. The method also specifies that atleast one of the labelled probe and the unlabelled probe should be a peptide nucleic acid (PNA) probe. (b) The next step involves detecting the presence or amount of TS present in the sample by directly or indirectly quantitating the cetectable moiety of the detectable probe which hybridised to the TS. In the example given, two DNA target oligonucleotides which differed in the example given, two DNA target oligonucleotides which differed in the example given, two DNA target oligonucleotides which differed in the example given, two passet to the TS. In the example given, two passet to the TS. In the example given, two passet to the WAV33234) which were detected in experimental assays using labelled PNA and DNA probes, such as the present sequence, (see AAV33234) where were performed to examine, compare and quantitate the effects associated with the addition of unlabelled blocker probes, such as the present sequence, (see AAV33236 and AAV33241. The results showed a significant increase in the discrimination of single base changes in target DNA by using the blocker probes. The invention claims that the improves the sensitivity of the assay thereby improving the signal to noise ratio of the assay. Suppression of nonspecific binding of a labelled probe directly improves the sensitivity of the assay thereby improving the signal to costitives and false negative would also be reduced. Using this method, it is claimed that several logs of improvement can be achieved in point of the assay is improvement can be achieved in point of the assay signated on 25-MAR-2003 to correct PI field.)
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Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels 302 TGGAGCTGTTGGTG 315 15 rechecreeres g ò

Gaps

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RESULT 1570 AAX60195

AAX60195 standard; DNA; 15 BP. AAX60195;

10-AUG-1999 (first entry)

Target DNA for pyrimidinone derivative of the invention.

Pyrimidinone derivative; labeled binding partner; diagnostic assay; antisense; transfection complex; primer; probe; ss.

Synthetic.

WO9924452-A2

20-MAY-1999.

98WO-US023119. 30-OCT-1998;

97US-00966392 97US-00966875 07-NOV-1997; 10-NOV-1997;

(ISIS-) ISIS PHARM INC.

Matteucci MD; Lin K,

WPI; 1999-370671/31.

Composition comprising pyrimidinone derivatives for diagnostic and analytical labels.

Example 4; Page 88; 101pp; English.

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             The specification describes pyrimidinone derivatives. These derivatives are used as labeled binding partners, particularly as labels for diagnostic, analytical and therapeutic applications. The derivatives used as detectable labels for diagnostic assays, to enhance diagnostic assays that use oligonucleotides and to improve potency of also principle oligonucleotides and to improve potency of altering intracellular metabolism of complementary RNA sequences encoding a traget gene. They are also used in transfection complexes to deliver oligonucleotides into cell cyroplasm and in PCR e.g. as primers, and ligase chain reaction (LCR) e.g. as probes. The derivatives have facilitate PCR and LCR processes. The present sequences and target for pyrimidinone derivatives of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX30947-11815 represent tag sequences of transcripts that are differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to isolate unidentified genes from cDNA libraries. The tag sequences can also be used in a method for diagnosing colon or pancreatic cancer in a sample suspected of being neoplastic. The method comprises comparing the level of at least one transcript in a first sample of a tissue to a second sample, where the first sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and
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differentially expresent tag sequences of transcripts that are differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to isolate unidentified genes from cDNA libraries. The tag sequences can also be used in a method for diagnosting colon or pancreatic cancer in a sample suspected of being neoplastic. The method comparises comparing the level of at least one transcript in a first sample of a tissue to a second sample, where the first sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and
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                                       AAX31073 standard; DNA; 15 BP.
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Best Local Similarity
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                                       Sequence 15 BP; 2 A; 8 C; 3 G; 2 T; 0 U; 0 Other;
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treatment of cancer
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AAX30947-31815 represent tag sequences of transcripts that are differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to
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                                         Use of isolated gene transcripts - useful for developing products for the diagnosis, prognosis and treatment of cancers, particularly colon and pancreatic cancer.
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                                                                                                                                                                       97US-0047352P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-0047352P
                                                                                                                             98WO-US010277
                                                                                                                                                                                                              (UYJO ) UNIV JOHNS HOPKINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGAACTAATACTA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           UNYOO ) UNIV JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kinzler KW;
                                                                                                                                                                                                                                                        Vogelstein B, Kinzler KW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12; Conservative
                                                                                                                                                                                                                                                                                                    WPI; 1999-070161/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   treatment of cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vogelstein B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      409853319-A2
                                                                                                                                                                         21-MAY-1997;
  Homo sapiens
                                         WO9853319-A2
                                                                                                                           20-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-NOV-1998
                                                                                   26-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX31169;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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Gaps

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Gaps

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Indels

3

Pred. No. 9e+02; 0; Mismatches

85.7%;

Best Local Similarity 85.7 Matches 12; Conservative

differentially expresent tag sequences of transcripts that are differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to isolate unidentified genes from cDNA libraries. The tag sequences can also be used in a method for diagnosing colon or pancreatic cancer in a sample suspected of being neoplastic. The method comprises comparing the level of at least one transcript in a first sample of a tissue to a being neoplastic and the second sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and ö isolate unidentified genes from cDNA libraries. The tag sequences can also be used in a method for diagnosing colon or pancreatic cancer in a sample suspected of being neoplastic. The method comprises comparing the level of at least one transcript in a first sample of a tissue to a second sample, where the first sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and treatment of cancer. Use of isolated gene transcripts - useful for developing products for diagnosis, prognosis and treatment of cancers, particularly colon and pancreatic cancer. Gaps pancreatic cancer; colon cancer; ss. ; 0 Tag sequence of a transcript decreased in colorectal cancer. Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels Sequence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other; Sequence 15 BP; 1 A; 2 C; 5 G; 7 T; 0 U; 0 Other; Claim 1; Page 53; 120pp; English. Tag sequence; colorectal cancer;
diagnosis; prognosis; treatment; AAX31491 standard; DNA; 15 BP. 97US-0047352P. 98WO-US010277 1060 CCAAACCCAAGCTT 1073 (UYJO) UNIV JOHNS HOPKINS. Vogelstein B, Kinzler KW; (first entry) 15 CAAAACCCAAGCAT 2 WPI; 1999-070161/06. 20-MAY-1998; 21-MAY-1997; Homo sapiens WO9853319-A2 21-MAY-1999 26-NOV-1998. AAX31491; 1577 RESULT

0.5%; Score 10.8; DB 1; Length 15;

Query Match

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This sequence represents a peptide nucleic acid that can be used in the composition of the invention. The composition comprises at least 1 probing polymer (PP), at least 1 annealing polymer (AP) and at least 1 set of donor (D) and acceptor (A) groups where at least 1 of the component polymers is a non-nucleic acid polymer. The compositions are particularly used to detect, identify or quantify nucleic acids that are present (or product of an present (or product of an present (or product of an amplification reaction, or present in (living) cells or tissue. Some preferred applications are detecting viruses and other microorganisms (e.g. in foods, water, pharmaceuticals, etc., including biological warfare agents); to determine effects of antimicrobial agents; for diagnosis of disease (e.g. genetic disorders such as cancer, thalassemia, cystic fibrosis etc.); for analysis/manipulation of plants and their geneceptibility to drug increactions. Many different targets can be detected in a single reaction, using a common (AP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Complex of probing and annealing polymers, labeled with donor and acceptor molecules, useful for detecting, identifying or quantifying target nucleic acids.
                                                                                                                                                                                                                                            Peptide nucleic acid; probing polymer; annealing polymer; detection; identification; virus detection; microorganism; antimicrobial agent; disease; genetic disorder; cancer; thalassemia; cystic fibrosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                     /*tag= a
/note= "Cy3-8-amino-3,6-dioxaoctanoic acid-A"
15
                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= b
/note= "A-lysine(5(6)carboxyfluorescein)-NH2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5%; Score 10.8; DB 1; Length 85.7%; Pred. No. 9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hyldig-Nielsen JJ;
                                                                                                                                                                                                                Peptide nucleic acid probe number 10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 12; Page 51; 122pp; English.
                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                 В.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0079211P
1053 CCTGGCCCCAAACC 1066
                                                                                                                 AAZ27396 standard; DNA; 15
                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BOST-) BOSTON PROBES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gildea BD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-580488/49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                     modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                     modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-MAR-1998;
                                                                                                                                                                                 07-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9949293-A2
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                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Coull JD,
                                                                                                                                                   AAZ27396;
                                                                                 RESULT 1578
                                                                                                                                                                                                                                                                                                                                                     Key
                                                                                                   AAZ27396
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Tue Mar
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This sequence represents a peptide nucleic acid that can be used in the composition of the invention. The composition comprises at least 1 probing polymer (PP), at least 1 annealing polymer (AP) and at least 1 cet of donor (D) and acceptor (A) groups where at least 1 of the component polymers is a non-nucleic acid polymer. The compositions are preticularly used to detect, identify or quantify nucleic acids that are preferred application are closed tube assay, e.g. the product of an amplification reaction, or present in (living) cells or tissue. Some preferred applications are detecting viruses and other microorganisms (e.g. in foods, water, pharmaceuticals, etc., including biological warfare agents); to determine effects of antimicrobial agents; for diagnosis of disease (e.g. genetic disorders such as cancer, thalassemia, cystic fibrosis etc.); for analysis/manipulation of plants and their geneceptibility to drug interactions. Many different targets can be cheected in a single reaction, using a common (AP) ö Complex of probing and annealing polymers, labeled with donor and acceptor molecules, useful for detecting, identifying or quantifying target nucleic acids. Gaps Peptide nucleic acid; probing polymer; annealing polymer; detection; identification; virus detection; microorganism; antimicrobial agent; disease; genetic disorder; cancer; thalassemia; cystic fibrosis; ss. .. 0 /*tag= b /note= "A-lysine(5(6)carboxyfluorescein)-NH2" /*tag= a /note= "Cy3-8-amino-3,6-dioxaoctanoic acid-A" Query March 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels Indels Seguence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other; .. Mismatches Gildea BD, Hyldig-Nielsen JJ; Peptide nucleic acid probe number 10 Example 12; Page 51; 122pp; English. Location/Qualifiers . 0 AAZ27396 standard; DNA; 15 BP. 98US-0079211P. 99WO-US006422. 1134 CACCTCCAGCTCCA 1147 2 CGCCACCAGCTCCA 15 (first entry) (BOST-) BOSTON PROBES INC. 12; Conservative ′*tag= WPI; 1999-580488/49 Key modified_base modified base 07-DEC-1999 24-MAR-1999; 24-MAR-1998; WO9949293-A2 30-SEP-1999. Coull JD, Synthetic. AAZ27396; RESULT 1579 Matches ò

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This sequence represents a peptide nucleic acid that can be used in the composition of the invention. The composition comprises at least 1 probing polymer (PP), at least 1 annealing polymer (AP) and at least 1 ce to fdonor (D) and acceptor (A) groups where at least 1 of the component polymers is a non-nucleic acid polymer. The compositions are particularly used to detect, identify or quantify nucleic acids that are present (or produced) in a closed tube assay, e.g. the product of an preferred applications are detecting viruses and other microorganisms of in foods, water, pharmaceuticals, etc., including biological warfare agents); to determine effects of antimicrobial agents; for diagnosis of disease (e.g. genetic disorders such as cancer, thalassemia, cystic fibrosis etc.); for analysis/manipulation of plants and their cystic fibrosis etc.); for analysis/manipulation of plants and their susceptibility to drug interactions. Many different targets can be common (AP)
                                                                                                                                                                                                                                                                                                                                                                          /*tag= a
/note= "5(6)-carboxyfluorescein-8-amino-3,6-dioxaoctaonic
acid modified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Complex of probing and annealing polymers, labeled with donor and acceptor molecules, useful for detecting, identifying or quantifying target nucleic acids.
                                                                                                                                                                                                                                       Peptide nucleic acid; probing polymer; annealing polymer; detection; identification; virus detection; microorganism; antimicrobial agent; disease; genetic disorder; cancer; thalassemia; cystic fibrosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hyldig-Nielsen JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 12; Page 51; 122pp; English.
                                                                                                                                                                                                           Peptide nucleic acid probe number 1.
                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= b
/note= "amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0079211P.
302 TGGAGCTGTTGGTG 315
                                                                                                            AAZ27387 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BOST-) BOSTON PROBES INC.
                                                                                                                                                                               (first entry)
                            c
               15 TGGAGCTGGTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gildea BD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-580488/49.
                                                                                                                                                                                                                                                                                                                                            Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                           modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9949293-A2
                                                                                                                                                                             07-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-SEP-1999.
                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Coull JD,
                                                                                                                                             AAZ27387;
                                                                                RESULT 1580
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Gaps

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Ouery Match

0.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 9e+02;
Matches 12; Conservative 0; Mismatches 2; Indels

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Gaps

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This sequence represents a peptide nucleic acid that can be used in the composition of the invention. The composition comprises at least 1 problemer (PP), at least 1 annealing polywer (PP), the least 1 annealing polywer (PP), at least 1 annealing polywer (PP), and acceptor (A) groups where at least 1 of the component polymers is a non-nucleic acid polymer. The compositions are particularly used to detect, identify or quantify nucleic acids that are particularly used to detect, identify or quantify nucleic acids that are present (or produced) in a closed tube assay, e.g. the product of an amplification reaction, or present in (living) cells or tissue. Some preferred applications are detecting viruses and other microorganisms (e.g. in foods, water, pharmaceuticals, etc., including biological warfare agents); to determine effects of antimicrobial agents; for diagnosis of disease (e.g. genetic disorders such as cancer, thalassemia, cystic fibrosis etc.); for analysis/manipulation of plants and their succeptibility to drug interactions. Many different targets can be detected in a single reaction, using a common (AP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Complex of probing and annealing polymers, labeled with donor and acceptor molecules, useful for detecting, identifying or quantifying target nucleic acids.
                                                                                                                                                                                                                                                                          Peptide nucleic acid; probing polymer; annealing polymer; detection; identification; virus detection; microorganism; antimicrobial agent; disease; genetic disorder; cancer; thalassemia; cystic fibrosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Coull JD, Gildea BD, Hyldig-Nielsen JJ;
                                                                                                                                                                                                                                        Peptide nucleic acid probe number 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 12; Page 51; 122pp; English.
                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= b
/note= "amidated"
                                                                                                                            AAZ27387 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0079211P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US006422.
1134 CACCTCCAGCTCCA 1147
                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (BOST-) BOSTON PROBES INC.
                            CGCCACCAGCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-580488/49.
                                                                                                                                                                                                                                                                                                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-MAR-1998;
                                                                                                                                                                                                    07-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9949293-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-SEP-1999,
                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                AAZ27387;
                                                                                        RESULT 1581
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Peptide nucleic acid, probing polymer; annealing polymer, detection, identification; virus detection, microorganism; antimicrobial agent; disease, genetic disorder; cancer; thalassemia; cystic fibrosis; ss.
                                                                                                                                                                                                                                                                                                                                                                     Complex of probing and annealing polymers, labeled with donor and acceptor molecules, useful for detecting, identifying or quantifying
                                                                                                                                                                                          /*tag= a
/note= "5(6)-carboxyfluorescein- 8-amino-3,6-
                                                                                                                                                                                                                           /*tag= b
/note= "A-lysine(dabcyl)-NH2'
                                                                                                                                                                                                                                                                                                                                      Coull JD, Gildea BD, Hyldig-Nielsen JJ;
                                                                                                                                                                                                           dioxaoctanoic acid-A"
                                                                                                         Peptide nucleic acid probe number 9.
                                                                                                                                                                                                                                                                                                                                                                                                        Example 12, Page 51; 122pp; English.
                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                     99WO-US006422.
                                                                                                                                                                                                                                                                                                     98US-0079211P.
302 TGGAGCTGTTGGTG 315
                                                       AAZ27395 standard; DNA; 15
                                                                                        07-DEC-1999 (first entry)
                                                                                                                                                                                                                                                                                                                     (BOST-) BOSTON PROBES INC.
            15 TGGAGCTGGTGGCG
                                                                                                                                                                                                                                                                                                                                                                                       target nucleic acids.
                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-580488/49.
                                                                                                                                                                           Key
modified_base
                                                                                                                                                                                                                   modified base
                                                                                                                                                                                                                                                                                   24 - MAR-1999;
                                                                                                                                                                                                                                                                                                     24-MAR-1998;
                                                                                                                                                                                                                                                     WO9949293-A2
                                                                                                                                                                                                                                                                     30-SEP-1999
                                                                                                                                                          Synthetic.
                                                                        AAZ27395;
                                       RESULT 1582
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                                                                                                                                                                                          /*tag= a
/note= "5(6)-carboxyfluorescein-8-amino-3,6-dioxaoctaonic
acid modified"
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Gaps

.. 0

Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels

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Gaps

. 0

detected in a single reaction, using a common (AP Sequence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other;

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This sequence represents a peptide nucleic acid that can be used in the composition of the invention. The composition comprises at least 1 probing polymer (PP), at least 1 annealing polymer (AP) and acceptor (A) groups where at least 1 of the component polymers is a non-nucleic acid polymer. The compositions are particularly used to detect, identify or quantify nucleic acids that are present (or produced) in a closed tube assay, e.g. the product of an ambification reaction, or present in (living) cells or rissue. Some preferred applications are detecting viruses and other microorganisms (e.g. in foods, water, pharmaceuticals, etc., including biological warfare agents); to determine effects of antimicrobial agents; for diagnosis of disease (e.g. genetic disorders such as cancer thalassemia, cystic fibrosis etc.); for analysis/manipulation of plants and their succeptibility to drug interactions. Many different targets can be detected in a single reaction, using a common (AP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Complex of probing and annealing polymers, labeled with donor and acceptor molecules, useful for detecting, identifying or quantifying target nucleic acids.
                                                                                                                                                                                                                                                    Peptide nucleic acid; probing polymer; annealing polymer; detection; identification; virus detection; microorganism; antimicrobial agent; disease; genetic disorder; cancer; thalassemia; cystic fibrosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                         /*tag= a
/note= "5(6)-carboxyfluorescein- 8-amino-3,6-
dioxaoctanoic acid-A"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= b
/note= "A-lysine(dabcyl)-NH2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gildea BD, Hyldig-Nielsen JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 12; Page 51; 122pp; English.
                                                                                                                                                                                                                   Peptide nucleic acid probe number 9.
                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                    AAZ27395 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US006422.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0079211P
1134 CACCTCCAGCTCCA 1147
                              deceaceacerce 15
                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BOST-) BOSTON PROBES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-580488/49
                                                                                                                                                                                                                                                                                                                                                        Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                         modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-MAR-1999;
                                                                                                                                                                                   07-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9949293-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-SEP-1999
                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Coull JD,
                                0
                                                                                                                                                   AAZ27395;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                  AAZ27395
                                                                                  RESULT
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capable of modulating a process in a biological system. The method
capable of modulating a process in a biological system. The method
comprises: (a) introducing into the system a random library of nucleic
coid catalysts (NAC) having a substrate binding domain (SBD), comprising
a random sequence, and a catalytic domain (CD); and (b) identifying NAC
in systems where modulation has occurred and/or determining the sequence
of at least part of the SBDs in such systems. Nucleic acid molecules with
endonuclease activity and catalytic activity, from the present invention,
are used to modulate gene expression in plant and mammalian cells and to
cleave target nucleic acid, particularly for treating systemic diseases
caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
ascites and infection. They may also be used to detect genetic drift and
acit mitseased cells and to determine c-raf RNA. Specifically NACs
with RNA-cleaving activity that modulate expression of the Raf gene, are
used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
generally any condition associated with the level of c-raf. Introduction
of sugar/phosphate modifications increases stability against nuclease and
activity. AAV90922 to AAV93877 repersent NACs that can be used in the
method, specifically for modulating the expression of a Raf gene
                                                                                                                                                                                                                                                                                   Human, c-raf, A-raf, B-raf, hammerhead ribozyme, hairpin ribozyme;
target; substrate; catalyst; modulation, expression; Raf gene; delivery;
screening; identification; synthesis; deprotection; purification; cancer;
inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
restenosis; rheumatoid arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying new catalytic nucleic acid that modulates selected processes - sespecially tibozymes that cleave Raf RNA for treating cancer, restenceis, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.
                                                                                                                                                                                                                                                Target sequence with sequence homology to c-raf and B-raf position 1603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bellon L;
Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matulic-Adamic J, Reynolds M, Kisich K,
Beigelman L, Mcswiggen JA, Karpeisky A,
J, Workman CT, Beaudry A, Sweedler D;
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97US-0049002P.
97US-0051718P.
97US-0061321P.
97US-0061321P.
97US-0061324P.
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302 TGGAGCTGTTGGTG 315
                                                                                                                                 AAV93860 standard; RNA; 15
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                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
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Parry I, Bei
Thompson J,
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02-OCT-1997;
02-OCT-1997;
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09-JUN-1997
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Gaps

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2; Indels

Local Similarity 85.7 nes 12; Conservative

Best Loc Matches

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Page 736
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention is directed to methods, kits and compositions pertaining to Linear Beacons. It provides novel polymers that comprise at least one linked acceptor moiety where the donor and acceptor moieties are separated by a nucleobase sequence (NBS) and where the polymer form a stem and loop hairpin and is further characterized in that the efficiency of transfer of energy between the donor and acceptor moieties when the polymer is solvated in aqueous solution is independent of at least 2 variables selected from: (a) NBS length; (b) spectral overlap of the donor moiety and the acceptor moiety; (c) presence or absence of magnesium in the aqueous solution; and (d) ionic strength of the aqueous solution. The polymers have a structure such that upon hybridisation to a target sequence the efficiency of energy transfer between the donor and acceptor moieties is altered such that detectable signal from at least one moiety can be used to monitor or quantitate occurrence of the hybridisation event. The polymers can be used to detect organisms in e.g. food, beverages, water, pharmaceutical,
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                                                                                                                                                                                                                                                         Linear Beacon; polymer; nucleobase sequence; hybridisation; signal; energy transfer; organism detection; pharmaceutical; beta-thalassemia; nucleic acid detection; sickle cell anemia; Factor-V Leiden; cancer; cystic fibrosis; forensic; prenatal screening; paternity testing; probe;
                                                          Gaps
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0
                                Score 10.8; DB 1; Length 15;
Pred. No. 9e+02;
5; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New polymers, particularly for use as hybridization probes
                                                                                                                                                                                                                                                                                                                                                                            /*tag= a
/note= "5(6)carboxyfluorescein labeling"
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          Sequence 15 BP; 2 A; 5 C; 2 G; 0 T; 6 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
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/note= "dabcylated"
                                                                                                                                                             AAX82055 standard; DNA; 15 BP.
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98US-00179162.
                                                                                                                                                                                                                                     DNA probe sequence DNA003-15.
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                                Query Match
Best Local Similarity 50.0%;
Matches 7; Conservative
                                                                                933 CCTCCTCTTCATTG 946
                                                                                            ccuacucucaugg 15
                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BOST-) BOSTON PROBES INC.
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modified_base
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                                                                                                                                                                                                                                                                                                                               Synthetic.
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                                                     Matches
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be used to examine clinical samples such as clinical specimens or equipment, fixtures and products such as clinical specimens or equipment, fixtures and products used to treat humans or animals. They can also be used to detect a target sequence which is specific for a genetically based disease or is specific for a predisposition to a genetically based disease, e.g. beta-thalassemia, sickle cell amemia. Pactor-V Leiden, cystic fibrosis and cancer related targets such as p55, p10, BRC-1 and BRC-2. They can also be used to detect a target sequence in a forensic technique such as prenatal screening, paternity testing, identity confirmation or crime investigation. Sequences AAX82052-56 represent DNA probe sequences which are of equivalent subunit length to linear basecons and is used to exemplify the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention is directed to methods, kits and compositions pertaining to Linear Beacons. It provides novel polymers that comprise at least one linked donor moiety, at least one linked acceptor moiety where the donor and acceptor moiety at a see separated by a mucleobase sequence (NBS) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Linear Beacon; polymer; nucleobase sequence; hybridisation; signal; energy transfer; organism detection; pharmaceutical; beta-thalassemis; nucleic acid detection; sickle cell anemia; Factor-V Leiden; cancer; cystic fibrosis; forensic; prenatal screening; paternity testing; probe;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag= a
/note= "5(6)carboxyfluorescein labeling"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other;
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/note= "dabcylated"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 14; Page 32; 78pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX82055 standard; DNA; 15 BP.
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98US-00179162.
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26-OCT-1998;
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schultz451-1.rng

Sequence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other;

.. 0 Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels 8

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Gaps

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RESULT 1

AAZ92431 standard; DNA; 15 BP

AAZ92431;

05-JUN-2000 (first entry)

Rhizoctonia sp. PCR primer, Eab group.

Antifungal, biocontrol; binucleate; non-pathogenic fungus; strain identification; classification; internal transcribed spacer; ITS region; 5.8s region; ribosomal; PCR primer; ss. strain

Rhizoctonia sp.

WO200004779-A1.

03-FEB-2000

99WO-GB002406. 23-JUL-1999; 98GB-00016265. 24-JUL-1998; (TECN-) INST TECNICO AGRONOMICO PROVINCIAL SA. (RUFF/) RUFFLES G K.

Rubio Susan V, Salazar Torres O, Julian Esquivias M; Gonzales Garcia V, Gomez-Acebo Gullon E, Munoz Gomez R; Lopez Corcoles H;

*PI; 2000-182492/16.

Protection of plants including tomato, pepper, lettuce, radish, parsley, sugar beat, rape, and onions against pathogenic fungi, uses a binucleate thizoctonia strain for biocontrol.

Disclosure; Page 14; 121pp; English

The invention relates to a novel method of protecting plants from pathogenic fungi. The method comprises biocontrol of pathogenic fungi via the uses of a non-pathogenic, binucleates Rhizoctonia is selected by molecular detection of certain binucleate Rhizoctonia is selected by molecular detection of certain internal transcribed spacer (ITS)-5.8s ribosomal DNA sequences (AAZ22445-AAZ22445), which vary between strains of these fungi. The invention also encompasses a concentrate for use in plant protection containing viable material from the binucleate Rhizoctonia strains of the invention, and princes (AAZ22437-22244) for identifying these strains. The strains of the invention are used as biocontrol agents for related pathogenic fungi. Binucleate Rhizoctonia isolate Eab-F2 was tested for its ability to protect tomato seedlings from the pathogenic Rhizocronia strain wee.

Consecutively (the binucleate stain followed by the pathogenic strain), consecutively (the binucleate strain was found to provide protection against the pathogenic strain when it had been allowed to colonise the vegetal surface. The binucleate strain was found to provide protection against the pathogenic strain when it had been allowed to colonise the vegetal surface prior to pathogenic fungal infection [i.e., consecutive consecution effect indicated by protection was provided when both strains were inoculated simultaneously. The method of the invention may be used to brotected include vegetables, crops such as oilseed rape, that may be provided vegetables, crops such as oilseed rape, creliable and provides economical biocontrol of diseases caused by the basis of their ITS sequences AAZ94131-Z92444 represent PCR primers which may be used to identify and distinguish strains of Rhizoctonia on the construint of the pathogenic theory classifying their pathogenicity

Sequence 15 BP; 4 A; 4 C; 4 G; 3 T; 0 U; 0 Other;

.; 0 Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels

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AAZ64021 standard; RNA; 15 BP. AAZ64021,

AAZ64021;

28-MAR-2000 (first entry)

Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 4132.

Bnzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage; cirrhosis; liver fallure; hepatocellular carcinoma; interferon; cancer; autoimmune disease; ss.

Hepatitis C virus.

WO9955847-A2.

04-NOV-1999.

99WO-US009027 26-APR-1999;

98US-0083217P. 98US-0100842P. 99US-00257608. 99US-00274553. 27-APR-1998; 18-SEP-1998; 25-FEB-1999; 23-MAR-1999;

(RIBO-) RIBOZYME PHARM INC

Macejak D; Pavco PA, Blatt L, Mcswiggen JA, Roberts E,

WPI; 2000-062023/05

Novel ribozymes for th hepatitis C infection.

The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a harmerhead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with hepaticellular carcinoma! The ribozymes may be used in combination with interferon to treat HCV infection, other infectious diseases, autoimmune t C the treatment of diseases and conditions related Claim 1; Page 78; 123pp; English

Sequence 15 BP; 0 A; 1 C; 8 G; 0 T; 6 U; 0 Other;

Gaps ., 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels Conservative Local Similarity hes 12; Conserv Query Match Best Loc Matches

1056 GGCCCCAAACCCAA 1069 14 GCCCCAAAACCCAA 1 ò

AAZ63941 standard; RNA; 15 BP. 28-MAR-2000 AAZ63941; RESULT 1589 AAZ63941/

(first entry)

Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 3095.

Hepatitis C virus

99WO-US009027. 26-APR-1999; 98US-0100842P. 18-SEP-1998;

Macejak D; Roberts E, Pavco PA, Mcswiggen JA, Blatt L,

the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by atther varying the length of the binding arms or by modification to prevent degradation by mucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and hepatocellular carcinoma. The ribozymes may be used in combination with interferon to treat HCV infection, other infectious diseases, autoimmune diseases, and cancer

Sequence 15 BP; 2 A; 2 C; 6 G; 0 T; 5 U; 0 Other;

Gaps 0 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; 2; Indels ive 0; Mismatches 2; Indels Matches 12; Conservative Local Similarity Query Match

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1042 ACTACTAAGCCCCT 1055 14 ACGAATAAGCCCCT 1 ઠ 엄

AAZ64114 standard; RNA; 15 BP. RESULT 1590 AAZ64114

28-MAR-2000 (first entry)

AAZ64114;

cleavage; cancer; Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 5139.

Bnzymatic nucleic acid, hammerhead ribozyme; virus replication; cirrhosis; liver failure; hepatocellular carcinoma; interferon; autoimmune disease; ss.

Hepatitis C virus

WO9955847-A2

04-NOV-1999

99WO-US009027. 26-APR-1999;

98US-0083217P. 98US-0100842P. 99US-00257608. 99US-00274553 18-SEP-1998; 25-FEB-1999; 27-APR-1998; 23-MAR-1999;

(RIBO-) RIBOZYME PHARM INC.

WPI; 2000-062023/05.

Macejak Mcswiggen JA, Roberts E, Pavco PA, Blatt L, Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.

Claim 1; Page 81; 123pp; English.

The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or

Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage; cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer; autoimmune disease; ss.

WO9955847-A2

04-NOV-1999

98US-0083217P. 27-APR-1998;

99US-00274553 23-MAR-1999;

(RIBO-) RIBOZYME PHARM INC

WPI; 2000-062023/05.

Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.

Claim 1; Page 75; 123pp; English.

The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves

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hmii: T - T C # Z 2 T nu 38

viral replication, and are used to treat diseases associated with hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failurs and hepatocellular carcinoma. The ribozymes may be used in combination with interferon to treat HCV infection, other infectious diseases, autoimmune diseases, and cancer 8.888888

Sequence 15 BP; 2 A; 8 C; 2 G; 0 T; 3 U; 0 Other;

.. 0 0.5%; Score 10.8; DB 1; Length 15; 78.6%; Pred. No. 9e+02; tive 1; Mismatches 2; Indels Query Match Best Local Similarity 78.61 Matches 11; Conservative

1085 CAGGCTTCACCCCC 1098

ò P

2 CAGGCUCCACCUCC 15

RESULT 1591 AAZ64114/c

AAZ64114 standard; RNA; 15 BP.

AAZ64114;

(first entry) 28-MAR-2000 Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 5139.

Bnzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage; cirrhosis; liver fallure; hepatocellular carcinoma; interferon; cancer; autoimmune disease; ss.

Hepatitis C virus.

W09955847-A2

04-NOV-1999

99WO-US009027 26-APR-1999; 98US-0083217P. 98US-0100842P. 99US-00257608. 99US-00274553. 27-APR-1998; 18-SEP-1998; 25-FEB-1999;

23-MAR-1999;

Blatt L, Mcswiggen JA, Roberts E, Pavco PA, Macejak D; (RIBO-) RIBOZYME PHARM INC.

WPI; 2000-062023/05.

Novel ribozymes for the treatment of diseases and conditions related to hepatitis $\mathbb C$ infection.

Claim 1; Page 81; 123pp; English.

The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the depatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and thereferon to treat HCV infection, other infectious diseases, autoimmune diseases, and cancer.

Sequence 15 BP; 2 A; 8 C; 2 G; 0 T; 3 U; 0 Other;

Gaps .. Length 15; Indels 0.5%; Score 10.8; DB 1; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Query Match
Best Local Similarity 85.77
Matches 12; Conservative

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g ò

RESULT 1592 AAZ63818/

AAZ63818 standard; RNA; 15 BP.

AAZ63818;

(first entry) 28-MAR-2000 Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 1861.

Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cirrhosis; liver failure; hepatocellular carcinoma; interferon; autoimmune disease; ss.

Hepatitis C virus.

WO9955847-A2.

04-NOV-1999.

99WO-US009027 26-APR-1999; 98US-0083217F. 98US-0100842F. 99US-00257608.

18-SEP-1998; 25-FEB-1999;

99US-00274553. 23-MAR-1999;

Blatt L, Mcswiggen JA, Roberts E, Pavco PA, Macejak (RIBO-) RIBOZYME PHARM INC.

WPI; 2000-062023/05.

Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.

Claim 1; Page 71; 123pp; English.

The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves conzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Heyatitis G virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme carget sites using a computer folding algorithm and regions of the miNA which did not form secondary folding structures and contained potential carget these sites were identified. Ribozymes were synthesised to rarget these sites and their activities optimised by either varying the rarget these sites and their activities optimised by either varying the carget the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatotis C virus (HCV) infection, e.g. cirrhosse, liver failure and hepatotis C virus (HCV) infection, other infectious diseases, autoimmune interferon to treat HCV infection, other infectious diseases, autoimmune

Sequence 15 BP; 2 A; 4 C; 3 G; 0 T; 6 U; 0 Other;

.; 0 Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels

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Gaps

735 GAAACAGAACACCG 748 15 GAAGAGTACACTG 2 g à

schultz451-1.rng

AAZ62752;

RESULT 1593

AAZ62

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The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Hapatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HVV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the many which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the target these sites and their activities optimised by either varying the carget the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and heteron to treat HCV infection, other infectious diseases, autoimmune cancer.
                                                 Enzymatic nucleic acid, hammerhead ribozyme; virus replication; cleavage; cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer; autoimmune disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.
              Substrate for HH ribozyme HCV-5133 which cleaves HCV RNA at nt.
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98US-0100842P.
99US-00257608.
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                                                                                                                                                          Hepatitis C virus.
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18-SEP-1998;
25-FEB-1999;
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cirrhosis, liver failure, hepatocellular carcinoma, interferon, cancer;
autoimmune disease, ss.
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98US-0100842P.
99US-00257608.
99US-00274553.
                                                                   AAZ62752 standard; RNA; 15 BP.
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25-FEB-1999;
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AAZ62667

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Hemopoietin receptor protein family NRB used for diagnosis of blood formation disorders.
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98JP-00297409
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19-OCT-1998;
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                                                 The invention relates to the isolation of sequences encoding human haemopoietin receptor protein family NR8 genes. The NR8 family sequences were initially searched for comparison on a nucleic acid database with the nucleic acid probe sequence TGGAGYNNNTGGAGY encoding the amino acid sequence Trp-Ser-Xaa-Trp-Ser. The sequences AAZ59258-Z59300 and AAZ90816-Z90925 represent specific examples of probe sequences used in the search. Antibodies to the NR8 family proteins are used for the diagnosis of blood formation disorders. Compounds identified as binding to the proteins are used for the treatment of such disorders
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                 Example 1; Page 43; 176pp; Japanese.
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Best Local Similarity 85.75
Matches 12, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAZ90841;
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to the isolation of sequences encoding human haemopoietin receptor protein family NR8 genes. The NR8 family sequences were initially searched for comparison on a nucleic acid database with the nucleic acid probe sequence TGGAGYUNNINGGAGY encoding the amino acid sequence Trp-Ser-Xaa-Trp-Ser. The sequences AAZ59258-Z59300 and AAZ90816-Z9025 represent specific examples of probe sequences used in the search. Antibodies to the NR8 family proteins are used for the diagnosis of blood formation disorders. Compounds identified as binding to the proteins are used for the treatment of such disorders
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Matches

RESULT 1598

AAZ9091

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The invention relates to the isolation of sequences encoding human haemopoietin receptor protein family NR8 genes. The NR8 family sequences were initially searched for comparison on a nucleic acid database with the nucleic acid probe sequence TGGAGYNNNTGGAGY encoding the amino acid sequence Trp-Ser-Xaa-Trp-Ser. The sequences AAZ59258-Z59300 and AAZ90816-Z90325 represent specific examples of probe sequences used in the search. Antibodies to the NR8 family proteins are used for the diagnosis of blood formation disorders. Compounds identified as binding to the proteins are used for the treatment of such disorders
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                                                                                                                                                                                                                                                                                                                                                            Hemopoietin receptor protein family NR8 used for diagnosis of blood formation disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mitrophanous K, Uden M, Rohll J, Kingsman SM, Kingsman AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
Haemopoietin receptor family, NRB, antibody, diagnosis, blood formation disorder, fusion protein, probe, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 2 A; 1 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                   (CHUS ) CHUGAI RES INST MOLECULAR MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Potential polypurine tract sequence #1.
                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 45; 176pp; Japanese.
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98JP-00297409.
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                                                                                                                                                                                                                                                                                          Maeda M;
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                                                      Homo sapiens.
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19-OCT-1998;
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                                                                                                                                                                                                                                                                                          Nomura H,
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AAA49150
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85.7%; Pred. No. 9e+02;
cive 0; Mismatches 2; Indels
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 Indels
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 Mismatches
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98JP-00297409
                                  1142 GCTCCACCTATACC 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              302 TGGAGCTGTTGGTG 315
                                                                                                                                                          AAZ90913 standard; DNA; 15
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                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                       Human NR8 gene probe #141
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 Conservative
                                                                     GCTCCACCTACTCC
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12;
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RESULT 1599

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                                                                                                                                         The present sequence is a potential polypurine tract sequence (PPT). The modification of this type of sequence has been shown to optimise the performance of lentiviral vectors. Retroviral based vectors can be used in the gene therapy of many diseases, including cancer, inflammatory diseases such as rheumatoid arthritis and systemic lupus erythematosus, cardiac arrest, myocardial infarction, diseases of the gastrointestinal tract, glandular diseases, renal diseases, dermal diseases, infertility, disease, antoimmune diseases, infertility disease, Alzheimer's disease, Down's syndrome, infectious diseases, and complications due to transplantation or gene therapy
                                              Retroviral vectors with increased titre and transduction ability for use in medicine, especially gene therapy comprises a plus-stranded synthesis
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/note= "Flu-00-Adenine, Cy3-0-Adenine or Cy3-00E, where
Flu is 5(6)-carboxyfluorescein, 0 is 8-amino-3,6-
dioxaoctanoic acid, Cy3 is cyanine 3 dye from Amersham,
is a solubility enhancer"
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/note= "optionally Adenine-Lysine(dabcyl) for probe BK-
Ras-Cy3"
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1. .15
1. tags a
1. tags a
1. notes "Peptide-nucleic acid backbone"
                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 8 A; 0 C; 7 G; 0 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide-nucleic acid probe WT-15Flu.
                                                                                                             Disclosure; Page 40; 50pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA29019 standard; DNA; 15 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 GAAAAGGGGGGAA 15
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                 WPI; 2000-400087/34.
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modified_base
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action had been electrostatically bound to polyethylane imine (PEI)
action which had been electrostatically bound to polyethylane imine (PEI)
derivatized beads could be specifically detected using labeled peptide-
nucleic acid (PNA) probes where the labeled (neutral) PNA would not
become immobilized to the beads in the absence of target nucleic acid,
but would hybridze, and therefore become immobilized to the beads, if the
target nucleic acid was present. The DNA templates for PCR were the human
become and a muent K-ras gene, which contains a point mutation at
K-ras gene and a muent K-ras gene, which contains a point mutation at
target nucleic acid sequence which is electrostatically bound to the
matrix and a non-nucleotide probe which specifically hybridiaes to a
portion of one or more target sequences. Immobilized probe/target
complexes can be detected, identified or quantitated under a wide range
of assay conditions. Reversible binding allows the complex to be removed
from the matrix for analysis. The method is rapid, sensitive, reliable
and versatile in detecting target sequences which are particular to
organisms found in fecod, beverages, water and pharmaceutical products.
The non-nucleotide probe/target sequence is protected against degrade
corganisms found in fecod, beverages, water and pharmaceutical products.
The non-nucleotide probe/target sequence is protected against degrade
sample contaminants. The methods, etc. are especially useful for
detection of single point mutations, and hence analysis of a genetically
based disease and in forensic techniques such as prenatal screening,
based disease and in forensic techniques use prenatel screening,
based disease and in forensic techniques as prenatal screening,
based disease and in forensic techniques as prenatal screening,
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                                                            Composition for identifying target sequence of nucleic acids for detecting genetic-diseases and pathogens in food and water, comprises non-nucleotide probe which sequence specifically hybridizes to target
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/note= "Flu-OO-Adenine, Cy3-O-Adenine or Cy3-OOE, where
Flu is 5(6)-carboxyfluorescein, O is 8-amino-3,6-
dioxacctanoic acid, Cy3 is cyanine 3 dye from Amersham,
is a solubility enhancer"
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/note= "Peptide-nucleic acid backbone"
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                                                                                                                                                                                Example 8; Page 33; 82pp; English.
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Best Local Similarity 85.77
Matches 12, Conservative
                   WPI; 2000-423449/36.
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modified_base
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                                                                                                                                  sequence.
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AAA29019/c
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AAA AAA29016-26 were used to examine whether the presence of target nucleic acids which had been electrostatically bound to polyethylene imine (PEI) decides which had been electrostatically bound to polyethylene imine (PEI) caid (PNA) probes where the labeled (neutral) PNA would not mucleic acid (PNA) probes where the labeled (neutral) PNA would not become immobilized to the beads in the absence of target nucleic acid, the beam of the prober immobilized to the beads, if the target nucleic acid was present. The DNA templates for PCN were the human K-ras gene and a mutant K-ras gene, which contains a point mutation at the pase 129 (see AAA2907-28). Novel compositions comprise a matrix, a target nucleic acid sequence which is electrostatically bound to the matrix and a non-nucleotide probe which specifically hybridizes to a portion of one or more target sequences. Immobilized probe/target complexes can be detected, identified or quantitated under a wide range of assay conditions. Reversible binding allows the complex to be removed from the matrix for analysis. The method is rapid, sensitive, reliable and versatile in detecting target sequences which are particular to corganisms found in food, beverages, water and pharmaceutical production of single point mutations, and hence analysis of a genetically based disease and in forensic techniques such as prenatal screening, based disease and in forensic techniques such as prenatal screening, beautinty testing, identity confirmation or crime investigation
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/note= "optionally Adenine-Lysine(dabcyl) for probe BK-
Ras-Cy3"
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                                                                                                                                                                                                                                                                                                    Johansen JT, Hyldig-Nielsen JJ, Fiandaca MJ,
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                                                                             WO200034521-A1
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                                                                                                                                                                                                                  08-DEC-1998;
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The present sequence is a mutated allele-specific oligonucleotide probe for the G590A mutation in the N-acetyltransferase 2 (NAT2) gene. NAT2 is a xenobiotic-metabolising enzyme. This probe can be used to determine the genotype of an individual at the nat2 locus, and thus determine their susceptibility to toxicity associated with certain drugs, and to certain types of cancer

Oligonucleotide probes hybridizing to genes encoding xenobiotics metabolizing enzymes cytochrome P450 and N-acetyl-transferase 2 (NAT2), useful for detecting genetic polymorphisms.

(HOPI-) HOPITAL SAINTE-JUSTINE

Sinnett D, Labuda D;

WPI; 2000-350761/30.

99WO-CA000982 98US-00177359

22-OCT-1999; 23-OCT-1998;

04-MAY-2000

40200024926-A1

schultz451-1.rng

Claim 22; Page 17; 58pp; English

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Gaps

.. 0

0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels

988 TCCATTGTTG 1001

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Query Match
Best Local Similarity 85.73
Matches 12; Conservative

15 rcaarrerrigade 2

AAA59902 standard; DNA; 15 BP.

RESULT 1604 AAA59902

Sequence 15 BP; 7 A; 4 C; 1 G; 3 T; 0 U; 0 Other;

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Osteogenic protein-1; OP-1; morphogenic protein; mouse; osteoporosis; morphogen concentration; bone metabolism disease; ss.
                                         Murine OP-1 Wt-1/Egr-1 binding site.
                                                                                                                                                                                                                       INC.
                                                                                                                                                               92US-00841646.
93US-00147023.
94US-00255250.
95US-00449700.
                                                                                                                                                                                                                       (CREA-) CREATIVE BIOMOLECULES
                                                                                                                                               95US-00486343
                         (first entry)
                                                                                                                                                                                                                                           Oppermann H, Ozkaynak
                                                                                                                                                                                                                                                             WPI; 2000-422077/36
                                                                                                                                               07-JUN-1995;
                                                                                                                                                                           01-NOV-1993;
                                                                                                                                                                                                      24-MAY-1995;
                                                                                                                                                                  21-FEB-1992;
                                                                                                            US6071695-A.
                                                                                                                                                                                             23-MAY-1995
                         16-0CT-2000
                                                                                                                              06-JUN-2000
        AAA59902;
                                                                                           Mus sp.
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                                                                                                                                                                                                                                                     N-acetyltransferase 2; NAT2; cancer; drug therapy; xenobiotic metabolism; allele-specific oligonucleotide probe; ss.
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Gaps

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0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; 2; Indels ive 0; Mismatches 2; Indels

302 TGGAGCTGTTGGTG 315

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Query Match
Best Local Similarity 85.7
Matches 12; Conservative

Screening for compounds able to modulate osteogenic protein-1 (OP-1)

N-acetyltransferase 2 G590A mutant ASO probe.

Unidentified

(first entry)

05-OCT-2000

SXXXXXXXXXXXXXX

AAA53251;

AAA53251 standard; DNA; 15

RESULT 1603 AAA53251/c

expression by incubating a candidate compound with a nucleic acid with a reporter gene operatively associated with an OP-1 non-coding nucleic acid fragment

Disclosure; Col 47; 33pp; English.

the expression of osteogenic protein-1 (OP-1) uses a cell transfected with a nucleic acid sequence comprising a reporter gene and an upstream non-coding sequence from OP-1. OP-1 is a tissue morphogenic protein. The method is useful for screening compounds capable of stimulating or method is useful for screening compounds capable of stimulating or method is useful for screening compounds compounds which may be used as therapeutics for in vivo and ex vivo compounds which may be used as therapeutics for in vivo and ex vivo mammalian applications, e.g. morphogen expression inducing compounds for correcting and alleviating a diseased condition or to regenerate lost or damaged tissue. The compounds may also be used to maintain viability of the differentiated phenotype of cells in culture. Morphogen expression inhibiting compounds identified by the new method can be used to modulate the differentiated of circulating of morphogen concentration. Compounds which uppregence and/or timing of morphogen concentration. Compounds which uppregence and/or timing of morphogen concentration. Compounds which uppreceduling a sequence contrained in the correct of the degree and/or timing of morphogen concentration. Compounds which uppreceduling sequence contrained in the proteins We-1 and Egr-1 binding sequence contained in the proteins We-1 and Egr-1 bind to and control transcription of DNA binding sequences at these sites

Sequence 15 BP; 0 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

0; Gaps 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; 2; Indels /ative Best Local Similarity 85.73 Matches 12; Conservative

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AAA66946 standard, DNA; 15

BP.

AAA66946;

(first entry) 19-OCT-2000 Human leukocyte antigen A allele DNA probe A239A SEQ ID NO:4.

Human leukocyte antigen, HLA; class I allele type; probe; PCR primer; amplification; hybridisation; organ transplant; gene typing; diagnosis;

Homo sapiens.

WO200031295-A1.

02-JUN-2000.

99WO-JP005527. 07-OCT-1999; 98JP-00335151. 26-NOV-1998;

(SHIO) SHIONOGI & CO LTD.

Moribe T, Kaneshige T;

WPI; 2000-400097/34.

Simple, rapid and accurate method for distinguishing HLA class I allele type with possibility of mechanization and automation, applicable in judging donor-recipient compatibility during organ transplant and disease diagnosis.

Claim 8; Page 50; 83pp; Japanese

The present invention describes a method for distinguishing a human leukocyte antigen (HLA) class I antigen or allele by a combination of polymerase chain reaction (PCR) using a primer pair whereby all HLA-A, -B or -C alleles can be amplified or using reverse hybridisation analysis comprising a DNA probe covalently bonded to microtitre plate wells which are hybridisable specifically with the base sequence of at least one specific HLA-A, -B or -C allele. The method is applicable in gene typing, judging donor-recipient compatibility during organ transplant and correlation analysis for diagnosis of various diseases. The method is simple, rapid and accurate, with possibility of mechanisation and automation, without the problems encountered by using the prior-art techniques. AAA66943 to AAA67072 represent oligonucleotide probes and PCR primers for use in the method of the present invention

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Sequence 15 BP; 4 A; 3 C; 8 G; 0 T; 0 U; 0 Other;

0; Gaps Query Match

0.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 9e+02;
Matches 12; Conservative 0; Mismatches 2; Indels

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1137 CTCCAGCTCCACCT 1150 15 CTCCGGCTCCTCCT

ò g RESULT 1606

BP. AMA87040 standard; DNA; 15

AAA87040;

15-JAN-2001 (first entry)

Probe to AluI human gene.

Detection, nucleic acid hybrid; depolymerisation; analysis; SNP; single nucleotide polymorphism; identification; viral load; probe; genotyping; medical marker diagnostic; primer; target; mutation; genetic disease; ss.

Homo sapiens.

WO200049180-A1.

24-AUG-2000.

18-FEB-2000; 2000WO-US004242.

99US-00252436. 99US-00358972. 99US-00383316. 18-FEB-1999; 21-JUL-1999; 25-AUG-1999;

(PROM-) PROMEGA CORP.

Mandrekar M, Kephart D, Rhodes RB; Olson RJ, Wood KV, Welch R; Shultz JW, Lewis MK, Leippe D, Andrews CA, Hartnett JR, Gu T,

WPI; 2000-565377/52.

Determining presence or absence of a predetermined endogenous nucleic acid sequence by using an enzyme that depolymenizes the 3' end of an oligonucleotide probe hybridized to a target sequence to release identifier nucleotides.

Example; Page 373; 389pp; English.

The present invention describes a method (MI) for determining the presence or absence of a predetermined endogenous nucleic acid target sequence (ENAT). The method comprises hybridising a probe having an identifier nucleotide (IN) with ENAT which is treated with an enzyme that depolymerises the 3' and of hybridised NA to release the INS. MI is used for determining the number of known sequence repeats present in a nucleic AAA87040

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acid target sequence in a nucleic acid sample. The method is also useful for determining whether a nucleic acid target sequence in a sample is an allele from a homozygous or hetezorygous locus. The method is also useful for detection of mutations, remaislocations and SNPs in nucleic acids (including those associated with genetic disease), determination of viral force associated with genetic disease), determination of viral forcensic samples. AAA86791 to AAA87079 and AAB12817 represent sequence which are used in the exemplification of the present invention. N.B. here is a discrepancy between the SEQ ID NO: and sequences given in the examples, and the SEQ ID NO: and sequences given in the from the present invention
                                                                                                                                                                     Gaps
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                                                                                                                                              Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                            Seguence 15 BP; 5 A; 6 C; 1 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                         1249 GACCCCATCCCCAA 1262
                                                                                                                                                                                                            2 GACCCATCTCTAA 15
      g
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Juman IRRR oligonucleotide #13 (first entry) 20-FEB-2001 AAC68357;

3357/c AAC68357 standard; DNA; 15

RESULT 1607 AAC68357/ Insulin receptor-related receptor; IRRR; chromosome 1q21-q24; obesity; dyslipidemia; diabetes; ss.

Homo sapiens.

40200065090-A2

02-NOV-2000.

19-APR-2000; 2000WO-US010644

22-APR-1999; 99US-00296906. 22-JUN-1999; 99US-00337976.

(ZYMO) ZYMOGENETICS INC.

Whitmore TE; Lok S,

WPI; 2000-687365/67.

Detecting a chromosome 1q21-q24 abnormality for diagnosing metabolic disease, such as human obesity and diabetic disorders, comprises examining insulin receptor-related receptor gene and its gene products.

Claim 10; Page 43; 111pp; English.

The present invention relates to insulin receptor-related receptor (IRRR). Mutations in this gene indicate a chromosome 1q21-q24 abnormality. IRRR polypeptides and DNA may be useful in the diagnosis of of disorders associated with abnormal expression of the IRRR protein, for example obesity, dyslipidemia and diabetes

Sequence 15 BP; 2 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

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0; Gaps
Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
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14 GGCACTCACGACTC a

ВP '573/c ABL57573 standard; DNA; 15 ABL57573/

ABL57573;

(first entry) 26-JUL-2002

Nucleic acid probe z.

Concentration, quantification, mutation detection; polymorphic; polymerase chain reaction; PCR; probe; ss.

Unidentified.

EP1046717-A2

25-OCT-2000.

20-APR-2000; 2000EP-00108643

20-APR-1999; 99JP-00111601.

(NIBI-) JAPAN BIOINDUSTRY ASSOC. (AGEN) AGENCY OF IND SCI & TECHNOLOGY. (XANK-) KANKYO ENG CO LTD.

Kanagawa T, Kamagata Y, Kurata S, Yamada K, Yokomaku T; Furusho K; Kurane R, Koyama O,

WPI; 2000-657765/64.

Determining the concentration of a target nucleic acid, useful e.g. for detecting genetic mutations, comprises using a fluorescently labeled probe in which emission is reduced by binding to the target nucleic acid.

Example 7; Page 24; 55pp; English.

The invention relates to the determination of the concentration of a nucleic acid target, using a fluorescently labeled probe which produces creduced fluorescence emission when hybridised to the target nucleic acid. The method comprises measuring the reduction in emission caused by the method comprises measuring the reduction in emission caused by the method comprises produced to the reduction, e.g. for concleic acids by a real-time polymerase chain reaction, e.g. for curcising microbial cells in co-cultures or symbiotic systems, for detecting gene mutations or polymorphisms, and for analysing melting curres of target nucleic acids to determine a Th value. Methods of the convention allow target nucleic acids to be quantified quickly, easily and accurately. Particularly there is no need to remove unbound probe, and no accurately. Particularly there is no need to remove unbound probe, and no accurately. Particularly there is no need to remove unbound probe, and no accurately are introduced that inhibit amplification by Tag polymerase (so conventional PCR conditions can be used). The specificity of PCR is kept of convention is reduced. Complex probes are not needed, and amplification can be used conventionally generated by a computer) has a higher correlation coefficient than conventional graphs so more accurate quantitation is coefficient than conventional graphs so more accurate quantitation is now possible. The current sequence represents a mucleic acid probe of the tonvention that was used for investigating the effects of the kinds of corresponding invention nucleic acid, and the kind of bases in its

Sequence 15 BP; 0 A; 9 C; 0 G; 6 T; 0 U; 0 Other;

Gaps ò Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels

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865 GGCACTGAGGACTC 878

01-DEC-2000

AAA72650;

RESULT 1609

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The present invention relates to the human uncoupling protein 3 the mitochondrial, proton carrier) (UCP3) gene and polymorphisms. The polymorphisms are associated with obesity, especially diabetes mellitus associated obesity. They polymorphisms may be identified and analysed to determine whether an individual is susceptible to obesity and may be used as the basis for targeted design of drugs to treat obesity. The present sequence was used in the identification and amplification of UCP3
                                                                                                                                                          UCP3; uncoupling protein 3; polymorphism; obesity; diabetes mellitus; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acids encoding uncoupling protein 3 (mitochondrial, proton carrier) (UCP3) proteins comprising single nuclectide polymorphisms, useful for the design of drugs for treating obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; ml acetylcholine receptor; CHRM1; immunogen; antibody; Alzheimer's disease; dementia with Lewy bodies; DLB; allele specific oligonucleotide probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                              UCP3 polymorphism detection allele specific primer #55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human CHMR1 allele specific oligonucleotide probe #17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 1 A; 10 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 15; Page 22; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Denton RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAS02957 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                          99US-0152789P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GENA-) GENAISSANCE PHARM INC (STEP/) STEPHENS J C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-OCT-2000; 2000WO-US028211.
                                                                                                                                                                                                                                                                                                                                                      08-SEP-2000; 2000WO-US024784.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Choi JY,
                                                                                                                                                                                                                                                            WO200118232-A2.
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                                                                                                                                                                                                                Homo sapiens
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                                                             21-JUN-2001
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                                                                                                                                                                                                                                                                                                             15-MAR-2001.
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                    AAH18942;
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AAS02957/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Involves amplifying the nucleic acid sequences in a sample involves amplifying the nucleic acid sample by PCR and then cleaving the amplified products with uracil DNA glycosylase (UDG), the resulting DNA camplified products with uracil DNA glycosylase (UDG), the resulting DNA regiments are detected using reverse blot hybridisation techniques. The method can be used to distinguish between two different sequences, for example for the detection of a DNA fragment carrying a mutation. The method is useful for detection of a DNA fragment carrying a mutation. The squence containing a polymorphic restriction site associated with a diseases such as cystic fibrosis disease, and may be used for detecting infectious diseases. Genetic disorders such as sickle cell anaemia, cystic fibrosis, alpha or beta thalassaemia, muscular dystrophy, and Tay-Sachs disease may also be detected using the method. Oncogenes such as CAS ancers. The present sequence represents a fragment of the cystic fibrosis (CF) gene created by UDG cleavage. This sequence is used in an example of the invention and contains the position of a mutation site in the CF gene. This fragment and the corresponding mutant containing fragment (AAA.72621) can be used to produce probes specifically to intentify the mutation, which can then be used in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Detecting specific nucleic acid sequence in sample containing nucleic acids involves amplifying nucleic acid, cleaving amplified products with uracil-DNA glycosylase to obtain DNA segments and detecting segments.
                                                                                                                                                                                                                                                                         Uracil DNA glycosylase; UDG; infectious disease detection; cancer; sickle cell anaemia; cystic fibrosis; thalassaemia; muscular dystrophy; Tay-Sachs disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                     Cystic fibrosis gene UDG-digest fragment SEQ ID #7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 9 A; 3 C; 3 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; Col 17; 21pp; English.
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ID AAH18942 standard; DNA; 15 BP.
                                                                                       AAA72650 standard; DNA; 15 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rerrregrerrice 2
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invention

Query Match

Best Loca Matches

15

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RESULT 1610

Nandabalan K;

29-OCT-1997; 29-OCT-1997;

Matson RS;

US6090553-A. 18-JUL-2000.

Synthetic.

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Gaps

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The sequence represents an allele specific oligonucleotide probe for acetylcholine receptor. CHMR1. CHMR1 is one subtype of a family of 5 genetylcholine receptor. CHMR1. CHMR1 is one subtype of a family of 5 genetically distinct muscarinic acetylcholine receptors, mAChR, that play important roles in higher brain function such as learning and memory. The protein is a possible drug target for treatments for Alzheimer's disease and antibodies raised against the protein are useful for diagnosing and expression of the gene or activity of the protein, e.g. Alzheimer's disease disease and dementia with Lewy bodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to beta tubulin mutations at positions 214,
                                                                                                                               New variants of the ml muscarinic acetylcholine receptor gene, useful find treatment for Alzheimer's and dementia, have single nucleotide variations at one or more of five polymorphic sites.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Polynucleotide mutations that confers resistance to paclitaxel for detecting paclitaxel-resistant cells in tumor biopsies from patients receiving paclitaxel therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                              ch 0.5%; Score 10.8; DB 1; Length 15; 1 Similarity 85.7%; Pred. No. 9e+02; 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3eta tubulin; mutant; paclitaxel; cancer; tumour; H6H7;
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 3 A; 4 C; 7 G; 1 T; 0 U; 0 Other;
                                                                      Stephens JC;
                                                                       Nandabalan K,
                                                                                                                                                                                           Claim 15; Page 19; 52pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 7; 106pp; English.
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                                           (GENA-) GENAISSANCE PHARM INC.
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               99US-0159269P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Beta tubulin mutation L215F2
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                                                                       Denton RR,
                                                                                                    WPI; 2001-282046/29
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-MAY-2000;
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               13-OCT-1999;
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                                                                       Choi JY,
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                                                                                                                                                                                                                                    ö
sensitivity in a sample from a cancer patient and for determining paclitaxel sensitivity in a sample from a cancer patient and for determining suitable therapeutics to treat cancer patients. If a mutation in the H6H7 region of tubulin is present then a non-pactitaxel oncologic medication that is an antimitotic drug which inhibits microtubule assembly is given Resistance of tumor cells or patients to drugs which affects microtubule assembly can be determined with the use of mutations in H6H7 region of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New polynucleotide useful for therapeutic purposes, comprises nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; ILLB; interleukin-1 beta; gene therapy; antiinflammatory;
single nucleopide polymorphism; SNP; polymorphic site;
inflammatory disorder; immune disorder; allele-specific oligonucleotide;
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                                                                                                                                                                                                    Length 15;
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                                                                                                                                                                                                                                    2; Indels
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                                                                                                                                                                                                  8; DB 1;
9e+02;
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                                                                                                                                                                                                  0.5%; Score 10.8; D
85.7%; Pred. No. 9e+0
iive 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                 BP.
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                                                                                                                                                                                                                                                                        1024 GGGGAGCTTGAAGG 1037
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                                                                                                                                                                                                                                                                                                            GGTGAGCTTGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                   AAH24389 standard; DNA;
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                                                                                                                                                                                                    Query Match
Best Local Similarity
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                                                                                                                                  tubulin
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1166 GICCCAACTITGCG 1179 2 GGCCCAACTICCG

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RESULT 1614 AAD05869

AAD05869 standard; DNA; 15

BP.

AAD05869;

(first entry) 31-JUL-2001 Human cholinergic receptor, muscarinic 3 gene ASO primer #13.

Human, cholinergic receptor muscarinic 3; CHRM3; drug screening; single nucleotide polymorphism; forensic application; gene therapy; Alzheimer's disease; Sjogren's syndrome; smooth muscle contractility; sudden infant death syndrome; genotyping; haplotyping; ASO; chromosome 1g41-q44; allele-specific oligonucleotide; PCR primer; ss.

WO200129176-A2.

26-APR-2001

12-OCT-2000; 2000WO-US028247.

99US-0159860P. 15-OCT-1999;

(GENA-) GENAISSANCE PHARM INC.

Stephens JC; Choi JY, Denton RR, Nandabalan K,

WPI; 2001-300326/31.

Novel polymorphic variant of reference sequence for human cholinergic receptor, muscarinic 3 gene, useful for diagnostic and therapeutic purposes.

Claim 15; Page 19; 54pp; English.

The patent relates to polymorphic variants of human cholinergic receptor, muscarinic 3 (CHRM3) gene. The polymorphic variant comprises at least one single nucleotide polymorphism selected from cytosine at PS1, adenine at PS2 or PS3, and cytosine at PS4. The invention also relates to a method for genotyping and haplotyping the CHRM3 gene for identification of variants. The polymorphic variant is useful for therapeutic purposes, for studying the expression and biological function of CHRM3, as well as for developing drugs targetting the CHRM3 protein. The variant is also useful in diagnostics and forensic applications. The recombinant nonhuman corganism transfected with the polymorphic variant is useful for studying expression of CHRM3 isogenes in vivo, for in vivo screening and testing corganism transfected with the polymorphic variant is useful for studying expression of CHRM3 isogenes in vivo, for in vivo screening and testing the rapeutic agents and compounds for Alzheimer's disease, Sjogren's syndrome, disorders associated with smooth muscle contractility and sudden infant death syndrome. The CHRM3 protein variant is useful in drug creening assays and its antibodies are useful in immunoassays to detect CHRM3 protein variants in biological samples. The present sequence is an allele-specific oligonucleotide (ASO) primer used for detecting human CHRM3 gene polymorphism

Sequence 15 BP; 3 A; 7 C; 1 G; 4 T; 0 U; 0 Other;

Gaps ö Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels

1131 CTTCACCTCCAGCT 1144 CTTCCCATCCAGCT 14

BP. AAS04304 standard; DNA; 15 AAS04304

AAS04304;

07-SEP-2001

Human DAXX DNA allele-specific oligonucleotide probe #5.

Death-associated protein 6; DAXX; polymorphism; haplotype pair; human; immune disorder; autoimmune disease; population diversity; ss; paternity testing; anthropological lineage; forensic application; oligonucleotide probe.

Homo sapiens

WO200125245-A2.

12-APR-2001.

05-OCT-2000; 2000WO-US027487.

06-OCT-1999; 99US-0157909P.

(GENA-) GENAISSANCE PHARM INC.

Nandabalan K, Chew A, Choi JY, Denton RR,

Stephens JC;

WPI; 2001-308220/32.

New human death-associated protein 6 (DAXX) gene variants comprising 19 polymorphic sites useful in studying the effect of variation on the biological activity of DAXX and in developing drugs targeting the protein.

Claim 15; Page 18; 97pp; English.

Sequences AASG4300-AASG4337 represent oligomucleotide probes specific for a DNA encoding human death-associated protein 6 (DAXX). This DNA may comparise one or more polymorphisms at specific nuclectide positions to comparise one or more polymorphisms at specific nuclectide positions between form one of nineteen possible polymorphic variants. Associations between a trait and a genotype or a haplotype of the DAXX gene can be identified by comparing the frequency of the genotype in a population can exhibiting the trait with that of a reference population. A higher frequency in the trait population indicates an association. Methods involving genotyping or haplotype pairs for the DAXX gene of an individual can lead to prediction of haplotype pairs for the DAXX gene of related individuals, and may be useful in studying the expression and biological individuals, and may be useful in studying the effect of the PAXX are useful in studying the effect of the colymorphic variation on the biological activity of DAXX as well as no the binding affinity of candidate drugs targeting DAXX as well as no the binding cateful for studying population diversity, anthropological lineage, customing the expression and other immune disorders. Polymorphism is also useful for studying population diversity, anthropological lineage, paternity testing, forensic applications, and for identifying containing affinities of one or more candidate drugs targeting the naws to make the DAXX genetic variation and a trait such as level to measure binding affinities of one or more candidate drugs targeting the DAXX protein

Sequence 15 BP; 4 A; 9 C; 1 G; 1 T; 0 U; 0 Other;

. 0 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; rative 0; Mismatches 2; Indels Query Match Best Local Similarity 85.7° Matches 12; Conservative

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1198 GCACCACCTATCA 1211 GCCCCACCCATCA 15

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AAF46516 standard; DNA; 15

RESULT 1617 AAF46516/c

IGFBP2 oligonucleotide #1355.

(first entry)

30-MAR-2001

AAF46516;

ВР.

Antisense therapy; antiproliferative; antinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasis; kidney disease; neobascular condition; hyperplasis; kidney disease;

schultz451-1.rng

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New human death-associated protein 6 (DAXX) gene variants comprising 19 polymorphic sites useful in studying the effect of variation on the biological activity of DAXX and in developing drugs targeting the
                                                                                         Death-associated protein 6; DAXX; polymorphism; haplotype pair; human; immune disorder; autoimmune disease; population diversity; ss; paternity testing; anthropological lineage; forensic application; oligonucleotide probe.
                                                                                                                                                                                                                                                         Choi JY, Denton RR, Nandabalan K, Stephens JC;
                                                                           Human DAXX DNA allele-specific oligonucleotide probe #31.
                                                                                                                                                                                                                                                                                                                                                Claim 15; Page 19; 97pp; English.
                                                                                                                                                                                                                                        (GENA-) GENAISSANCE PHARM INC
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                                                                                                                                                                                                                    06-0CT-1999; 99US-0157909P
                   AAS04330 standard; DNA; 15
                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the DAXX protein
                                                                                                                                                              40200125245-A2
                                                                                                                                             domo sapiens
                                                          07-SEP-2001
                                                                                                                                                                                 12-APR-2001
                                      AAS04330;
                                                                                                                                                                                                                                                           Chew A,
RESULT 1616
AAS04330/c
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Edmondson SR;

Werther GA,

Wraight CJ,

WPI; 2001-041421/05.

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P.

21-JUN-1999;

21-JUN-2000; 2000WO-AU000693.

WO200078341-A1.

28-DEC-2000.

Homo sapiens.

Sequences AASO4300-AASO4337 represent oligomuclectide probes specific for a DNA encoding human death-associated protein 6 (DAXX). This DNA may comparise one or more polymorphisms at specific nuclectide postitions to form one of nineteen possible polymorphic variants. Associations between a trait and a genotype or a haplotype of the DAXX gene can be identified by comparing the frequency of the genotype of the population. A higher can be identified by comparing the trait population indicates an association. Methods involving genotyping or haplotype pairs for the DAXX gene of an individual can lead to prediction of haplotype pairs for the DAXX gene of an individual can individuals, and may be useful in studying the expression and biological individuals, and may be useful in studying the effect of the variation on the biological activity of DAXX as well as on the binding affinity of candidate drugs targeting DAXX as well as not be binding affinity of candidate drugs targeting DAXX as well as not be binding affinity of candidate drugs targeting DAXX as well as in a sociations between the DAXX genefic variations of branching population diversity, anthropological lineage, between the DAXX genefic variations and a trait such as level of drug response or susceptibility to disease. DAXX proteins may be used the DAXX can be considered of candidate drugs targeting the more candidate drugs targeting targeting targeting the more candidate drugs targeting target

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                                                  Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
Sequence 15 BP; 1 A; 0 C; 10 G; 4 T; 0 U; 0 Other;
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1257 CCCCAACCCCTTC 1270

CACCAACCCCTAC 2

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGP]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, of inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the affects of psoriasis, capable, pityriasis, tuba, pilaris, serborrhoes, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a neovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic brain or skin, discase, higher proliferation of the inside of blood
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AAF46518 standard; DNA; 15
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hes 12; Conservative
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Antisense therapy, antiproliferative, antinflammatory, antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; Keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein; IGFB-2; IGFBP3; inflammation; psoriasis; plaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatoolsis, neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis; kidney disease; necovascular condition; hyperplasis; kidney disease;

IGFBP3 oligonucleotide #180.

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Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; insulin-like Growth Factor. I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                  Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 6; Page 42; 201pp; English.
                                                                                                                                                                                                                                                                                               99US-0140345P.
                                                 IGFBP2 oligonucleotide #1357.
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                          (first entry)
                                                                                                                                                                                                                                                                                                                                                  CJ, Werther GA,
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                                                                                                                                                                                             Homo sapiens.
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                          30-MAR-2001
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 AAF46518;
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Edmondson

Wnaight CJ, Werther GA, WPI; 2001-041421/05.

(MURD-) MURDOCH CHILDRENS RES INST.

21-JUN-1999; 99US-0140345P.

21-JUN-2000; 2000WO-AU000693

WO20007B341-A1. Homo sapiens.

28-DEC-2000.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGR]-1 receptor, IGF binding protein [IGFB]-2 or IGFB3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, of inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the attisense oligonucleotide of the present invention (see AAF45151 and AAF45153- F45161). The method is usful for ameliorating the effects of psoriasis, inchthyosis, pityriasis, ruba, pilaris, serborthoea, keloids, keratosis, neoplasias, soleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, the breath of sease, kidney disease, hyperplasia

Sequence 15 BP; 2 A; 0 C; 10 G; 3 T; 0 U; 0 Other;

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Gaps
                                       0;
ch 0.5%; Score 10.8; DB 1; Length 15; I Similarity 85.7%; Pred. No. 9e+02; 12; Conservative 0; Mismatches 2; Indels
   Query Match
Best Local (
                      Best Loc
Matches
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AAF46760 standard; DNA; 15 AAF46760; RESULT 1619
AAF46760/c
ID AAF46760
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AC AAF46760
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(first entry)

30-MAR-2001

AZZZEZEZEZEZ ò g

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein (for Insulin-like Growth Factor [IGF]-2 or IGFBP3), which is capable of inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide is useful for ameliorating the effects of psoriasis, inthyosis, plyriasis, ruba, pilaris, senborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperplasia
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
0.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 9e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 0 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                           Example 7; Page 45; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              624/c
AAF47624 standard; DNA; 15 BP.
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AAF47624/c
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisorders. The method comprises contacting the skin with an antisorse oligonucleoride, (for Insulin-like Growth Factor [167]-1 receptor, ISP binding protein [IGPBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, oligonucleoride which can be used to design the antisense oligonucleoride which can be used to design the affects of psoriasis, cligonucleoride of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, richthyosis, pityriasis, ruba, pllaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hypernecvascular condition such as a neovascular condition of the retina, drawn or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriaals, IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis, serborrhoea, ruba, keratosis; neoplasia; scleroderma, wart; skin cancer; sclerotic disease;
skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplama; kidney disease; neovascular condition; hyperplama; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                         Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 6 A; 4 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                             Edmondson SR;
                                                                                                                                                                                                                                                                            (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 7; Page 50; 201pp; English.
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                                                                                                                                                                                                              21-JUN-2000; 2000WO-AU000693.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IGF-I oligonucleotide #4924.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901 CTGGTCATTTTCTT 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF53964 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 credrearcar
                                                                                                                                                                                                                                                                                                             Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12; Conservative
                                                                                                                                                                                                                                                                                                                                          WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                              40200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                           inflammation.
                                                                                                                 domo sapiens.
                                                                                                                                                                                                                                             21-JUN-1999;
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                                                                                                                                                                               28-DEC-2000.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin discorder, insulin-like Growth Pactor. I receptor; IGF-1; pityriasis; IGF binding procein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neophasia; scleroderma; wart, skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis, kidney disease; necovascular condition; hyperplasis, kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to a method for ameliorating the effects of artisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45153-F45161). The method is useful for ameliotrating the effects of psoriasis, ichthyosis, pityriasis, tuba, pitaris, serborrhoea, Keloida, keratosis, ichthyosis, pityriasis, unats, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
iive 0; Mismatches 2; Indels
hyperneovascular condition; hyperplasia, kidney disease;
neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 4 A; 1 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                  (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 8; Page 93; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAF53970 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                             21-JUN-2000; 2000WO-AU000693.
                                                                                                                                                                                                                                                                                                                                       99US-0140345F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             991 ATTGTTTGTGGAA 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IGF-I oligonucleotide #4930.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 85.7 tes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-041421/05.
                                                                                                                                                        WO200078341-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inflammation.
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                                                                                                                                                                                                                                                                                                                                           21-JUN-1999;
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                                                                                                                                                                                                                  28-DEC-2000.
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGR]) receptor, IGF binding protein [IGRBP] - 2 or IGFBB], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45153 oligonucleotides of the present invention (see AAF4151 and AAF45153 inhthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, inhthyosis, pityriasis, unda pilaris, serborrhoea, keloids, keratosis, inhthyosis, pityriasis, unda pilaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other scleroic
                                                                                                                                                                                                                                                                                                          Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 4 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                 Edmondson SR
                                                                                                                                                                                    (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                   Example 8; Page 93; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vessels or any other hyperplasia
                                                                                                                                            99US-0140345P.
                                                                                                  21-JUN-2000; 2000WO-AU000693
                                                                                                                                                                                                                               Werther GA,
                                                                                                                                                                                                                                                                       WPI; 2001-041421/05.
                 WO200078341-AI.
                                                                                                                                                                                                                                                                                                                                                                           inflammation.
                                                                                                                                            21-JUN-1999;
                                                                                                                                                                                                                               Wraight CJ,
                                                          28-DEC-2000
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Local Similarity Matches

(first entry) 30-MAR-2001 AAF46488;

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin discorder, Insulin-like Growth Factor. I receptor; IGF-1, pityriasis, IGF binding proctein, IGFBP-2, IGFBP3, inflammation, psoriasis, pilaris, growth factor mediated cell proliferation, ichthyosis, serborrhoea, ruba, keratosis, neoplasia, scleroderma, wart, skin cancer, sclerotic disease, hypermeovascular condition, hyperplasia, kidney disease, neovascular condition, hyperplasia, kidney disease;

Homo sapiens

28~DEC-2000

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AAF46488 standard; DNA; 15 RESULT 1623

ВЪ.

GFBP2 oligonuclectide #1327.

AAF46488/ XX AC AAF4 XX DY 30-M XX KW ARLI KW SKIN KW SKIN KW SKIN KW GEOW KW GEOW KW HOROW K

WO200078341-A1

Matches 셤 ò ö 0; Gaps 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; live 0; Mismatches 2; Indels Conservative 12;

RESULT 1624

ВР.

AAF47175 standard; DNA; 15

IGFBP3 oligonucleotide #595 (first entry) 30-MAR-2001 AAF47175;

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin discorder, Insulin-like Growth Factor. I receptor, IGF-1; pityriasis; IGF binding procein, IGFB-2; IGFBP3; inflammation, psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; necovascular condition of the retina; ss.

Homo sapiens.

21-JUN-2000; 2000WO-AU000693

99US-0140345P 21-JUN-1999;

The present invention relates to a method for ameliorating the effects of a skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF] receptor, IGF binding protein [IGFBP] - or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present esquence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45153 ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Example 6; Page 42; 201pp; English.

inflammation.

Edmondson SR;

99US-0140345P

21-JUN-1999;

(MURD-) MURDOCH CHILDRENS

Wraight CJ, Werther GA,

WPI; 2001-041421/05

21-JUN-2000; 2000WO-AU000693

Seguence 15 BP; 0 A; 1 C; 10 G; 4 T; 0 U; 0 Other;

Similarity 85.7%; Pred. No. 9e+02; 12; Conservative 0; Mismatches 2; Indels 1247 CCGACCCCATCCCC 1260 Mar Local Sir. 12; f Query Match

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15 cccaccacaccc

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Gaps .. 0

WO200078341-A1.

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The present invention relates to a method for ameliorating the effects of shin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [167]) receptor, 107 binding protein [1688]-2 or 16783], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45153-F45161). The method is useful for ameliocating the effects of psoriasis, ichthyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skii, growth factor-mediated malignancies, other sclerotic vessel or an invention of the inside of blood
                                                                                                                                                             Ameliorating the effects of a disorder, e.g. psoriasis, by administering V (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
                                                                       Edmondson SR;
                    (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                  Example 7; Page 48; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       vessels or any other hyperplasia
                                                                    Wraight CJ, Werther GA,
                                                                                                               WPI; 2001-041421/05
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Sequence 15 BP; 3 A; 8 C; 1 G; 3 T; 0 U; 0 Other;

. 0 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ve 0; Mismatches 2; Indels 85.78; 1 Similarity 85.7 Query Match Local

1118 TGCCCAGTTCCACC 1131 1 receaserrecaee 14 ò

AAF50794 standard; DNA; 15 30-MAR-2001 AAF50794; RESULT 1625 AAF50794/

ВЪ

IGF-I oligonucleotide #1754. (first entry)

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, vytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF1, pityriasis; IGF binding protein, IGFBP-2, IGFBP3, inflammation, psoriasis; pilaris, growth factor mediated cell proliferation, ichthyosis; serborrhoea, ruba, keratosis, neoplasia; sclaroderma; wart, skin cancer; sclerotic disease, hyperneovascular condition; hyperplasis, kidney disease; necovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

38-DEC-2000.

21-JUN-2000; 2000WO-AU000693

(MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Werther GA, Wraight CJ,

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or Example 8; Page 72; 201pp; English inflammation.

WPI; 2001-041421/05.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like drowth Factor [IGFP-1] receptor, IGF binding protein [IGFP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, of inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the affects of psoriasis, oligonucleotide which can be used to design the effects of psoriasis, clichnyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, disease, kidney disease, hyperpoliferation of the inside of blood to vessels or any other hyperplasia

Sequence 15 BP; 3 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Gaps ·. 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred, No. 9e+02; ive 0; Mismatches 2; Indels Query Match
Best Local Similarity 85.7
Matches 12; Conservative

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Gaps

AAF45866 standard; DNA; 15 RESULT 1626 AAF45866

AAF45866;

30-MAR-2001 (first entry)

IGFBP2 oligonucleotide #705.

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein, IGFB-2; IGFB23; inflammation, psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis, neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; necovascular condition; hyperplasia; kidney disease;

Homo sapiens.

WO200078341-A1

28-DEC-2000

21-JUN-2000; 2000WO-AU000693

21-JUN-1999;

(MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering

Example 6; Page 42; 201pp; English.

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomucleoride, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomucleotide which can be used to design the antisense oligomucleotide which can be used to design the effects of psoriasis, cligomucleotides of the present invention (see AAF45151 and AAF45153-15451). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serbornhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, disease, kidney disease, hyperpoliferation of the inside of blood vessels or any other hyperplasia
     an antisense nucleic acid that cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 5 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
  inhibits or reduces growth factor mediated inflammation
                                                                                                            Example 6; Page 38; 201pp; English
                                                    inflammation
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Score 10.8; DB 1; Length 15; Pred. No. 9e+02; 0; Mismatches 2; Indels . 0.5%; 862 AAGGGCACTGAGGA 875 12; Conservative Local Similarity Query Match Matches

AAGGTCACTGAGCA 15

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AAF46392; 1627 AAF46392

BP.

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor. I receptor, IGF-1, pityriasis, IGF binding protein, IGFBP-2, IGFBP3, inflammation, psoriasis, pilaris, growth factor mediated cell proliferation, ichthyosis, serborrhoea, ruba, keratosis, neoplasia, scaleroderma, wart, skin cancer, sclerotic disease, hypermeovascular condition, hyperplasis, kidney disease, neovascular condition of the retina; s. GFBP2 oligonucleotide #1231. AAF46392 standard; DNA; 15 (first entry) 30-MAR-2001

WO200078341-A1. Homo sapiens. 28-DEC-2000

21-JUN-2000; 2000WO-AU000693

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P

21-JUN-1999;

Edmondson SR; Wraight CJ, Werther GA,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or infiammation.

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF] receptor, IGF binding protein [IGFBP] 2 or IGFBP3), which is capable inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153 and Inthyosis, pityriasis, mub, pitaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                        vessels or any other hyperplasia
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Sequence 15 BP; 7 A; 4 C; 4 G; 0 T; 0 U; 0 Other;

Gaps . 0 Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels

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762 IGCAGGITICITIC 775 14 recresionic 1 ò 셤

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Gaps . 0

2; Indels

AAF46784 standard; DNA; 15 RESULT 1628 AAF46784

ВР

30-MAR-2001 AAF46784;

IGFBP3 oligonucleotide #204. (first entry)

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid; skin discorder, Insulin-like Growth Factor I receptor; IGFP-1, pityliasis; IGF binding procein, IGFB-2, IGFBP3, inflammation, psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

(MURD-) MURDOCH CHILDRENS RES INST. 21-NUL-1999;

99US-0140345P.

Edmondson Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 45; 201pp; English.

effects of The present invention relates to a method for ameliorating the efskin disorders. The method comprises contacting the skin with an

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP] 2 or IGFBB3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oilgonucleotides of the present invention (see ARFSISI and AAFSIS3-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pitaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other selerotic disease, kidney disease, hyperproliferation of the inside of blood
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                                                                                                                                                                                                                                                                                                                                           Match 0.5%; Score 10.8; DB 1; Length 15; Local Similarity 85.7%; Pred. No. 9e+02; tes 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 0 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                               vessels or any other hyperplasia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IGFBP3 oligonucleotide #594.
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oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-8551.) The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperpoliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis, IGF binding protein, IGFBP-2; GPBP3; inflammation, psoriasis; pitaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis, kidney disease; neobascular condition; hyperplasis, kidney disease;
                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                               0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
live 0; Mismatches 2; Indels
                                                                                                                                                                                                                      Sequence 15 BP; 4 A; 7 C; 1 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF50567 standard; DNA; 15 BP.
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                                                                                                                                                                                                                                                                                                                                                     1118 TGCCCAGTTCCACC 1131
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                                                                                                                                                                                                                                                                                        Local Similarity 85.7
nes 12; Conservative
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                                                                                                                                                                                                                                                                    Query Match
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Tue Mar 88888888

neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperfoliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP, 4 A, 0 C; 5 G; 6 T; 0 U; 0 Other;

vessels or any other hyperplasia

SXS

Sequence 15 BP; 3 A; 8 C; 0 G; 4 T; 0 U; 0 Other;

0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels 1132 TTCACCTCCAGCTC 1145 TTCACCTCCACCAC 15 Query Match
Best Local Similarity 85.73
Matches 12; Conservative ð

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0; Gaps

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1631

IGF-I oligonucleotide #4923. AAF53963 standard; DNA; 15 30-MAR-2001 (first entry) AAF53963; AAF53963 RESULT

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-1le, Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein, IGFBF-2; IGFBF3; inflammation, psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea, ruba, keratosis, neoplasia; scleroderma, wart, skin cancer; sclerotic disease, hyperneovascular condition; hyperplasia, kidney disease; neoblation of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000

21-JUN-2000; 2000WO-AU000693.

99US-0140345P. 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST.

Wraight CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 93; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antidense oligomolecuted, (for Insulin-like Growth Factor [IGR]-1 receptor, IGF binding protein [IGREB]-2 or IGFBED), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomolecuties which can be used to design the antisense oligomolecuties of the present invention (see AAF45151 and AAF45153-F4511). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serbornhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a neoplasias, sichney disease, nyperproliferation of the inside of blood disease, kidney disease, hyperproliferation of the inside of blood

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                        Gaps
                        ..
                        Indels
   Length
, Match 0.5%; Score 10.8; DB 1;
Local Similarity 85.7%; Pred. No. 9e+02;
hes 12; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                    (MURD-) MURDOCH CHILDRENS RES INST.
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                                                                                                                                                                                                                                                                                                                                                                         21-JUN-2000; 2000WO-AU000693.
                                              991 ATTGTTTGTGGGAA 1004
                                                                                                                                                                                       IGFBP2 oligonucleotide #706
                                                                                                                       AAF45867 standard; DNA; 15
                                                                2 Arrarragedean 15
                                                                                                                                                                 30-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                         Wraight CJ, Werther GA,
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                                                                                                                                                                                                                                                                                                            Homo sapiens.
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                                                                                                                                            AAF45867;
    Query Match
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The present invention relates to a method for ameliorating the effects of akin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-P45161). The method is useful for ameliorating the effects of psoriasis, inchyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the Skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Example 6; Page 38; 201pp; English.

inflammation.

Sequence 15 BP; 5 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

1279 GAGGACAGCGCCCA 1292

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomucleotide, (for Insulin-like Growth Factor [IGF] receptor, IGF binding protein [IGRBP] - 2 or IGFBR3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomucleotide which can be used to design the antisense oligomucleotides of the present invention (see AAF4151 and AF45153 - P45161). The method is useful for ameliorating the effects of psoriasis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                  Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological; Keloid, skin discorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis, IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis, pilaris, growth factor mediated cell proliferation, ichthyosis; serborrhoea; ruba; keatosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition, hyperplasis, kidney disease; neobascular condition, hyperplasis, kidney disease;
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0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
sive 0; Mismatches 2; Indels
                                     2; Indels
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                                                                                                                                                                                                                                                                                                                                   GFBP3 oligonucleotide #1253.
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                                                                           862 AAGGGCACTGAGGA 875
                                                                                                                                                                                                                AAF47833 standard; DNA; 15
                                                                                                                1 AAGGTCACTGAGCA 14
                                                                                                                                                                                                                                                                                             (first entry)
                                       Conservative
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                    Best Local Similarity
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                                       12;
                                                                                                                                                                                                                                                        AAF47833;
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  Query Match
                                                                                                                                                                             RESULT 1633
                                       Matches
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antiboration of the form of the state [IGF] -1 receptor, IGF binding protein [IGFBP] -2 or IGFBP], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, coligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153 - CF 45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serbornhea, keloids, keratosis, cohthyosis, soleroderma, warts, benign growths, cancers of the skin, a neopastus condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic condition where the state of the inside of blood
                                                                                                                                                                                                                                                                                         Antisense therapy; antiproliferative; antinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; sth discorder; Insulin-like Growth Factor. I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBPB; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; kearsosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ameliorating the effects of a disorder, e.g. psoriasis, by administering by (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
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85.7%; Pred. No. 9e+02;
live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 2 A; 9 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 8; Page 63; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              vessels or any other hyperplasia
                                                                                                                                       ВÞ
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                                                                                                                                       AAF49379 standard; DNA; 15
                                                                                                                                                                                                                                                             IGF-I oligonucleotide #339.
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                                    14
                                                                                                                                                                                                                     (first entry)
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Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Werther GA,
                                      1 GAGCACAGCACCCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-JUN-1999;
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                                                                                                                                                                                                                     30-MAR-2001
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                                                                                                                                                                                AAF49379;
                                                                                                RESULT 1634
                                                                                                                    AAF49379
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Gaps

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Conservative

Local Similarity es 12; Conserv

Best Loca Matches

cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pitrylasis; IGF binding protein; IGFB-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; kertosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis; kidney disease; neovascular condition; hyperplasis; kidney disease;

antiproliferative; antiinflammatory; antipsoriatic;

(first entry)

30-MAR-2001

AAF49115;

IGF-I oligonucleotide #75

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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method for ameliorating the effects of akin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]) receptor, IGF binding protein [IGFBP] - 2 or IGFBP], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pliaris, serbornhoea, Keloids, Keratosis, ichthyosis, pityriasis, ruba, pliaris, serbornhoea, Keloids, Keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                    Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-1ke Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neoplasia; condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; Live 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MURD-) MURDOCH CHILDRENS RES INST.
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                                     AAF47077 standard; DNA; 15 BP.
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                                                                                                                                                                 IGFBP3 oligonucleotide #497
                                                                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-041421/05
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                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                         30-MAR-2001
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                                                                               AAF47077;
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RESULT 1635
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Edmondson SR;

Werther GA,

Wraight CJ,

(MURD-) MURDOCH CHILDRENS RES INST.

.99US-0140345P.

21-JUN-1999;

21-JUN-2000; 2000WO-AU000693

WO200078341-A1. Homo sapiens.

28-DEC-2000.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ameliorating the effects of a disorder, e.g. psoriasis, by administering V (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
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85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 1 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 8; Page 61; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vessels or any other hyperplasia
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1134 CACCTCCAGCTCCA 1147

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Conservative

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Similarity

Local

Best Loc Matches

ВP

AAF49115/c ID AAF49115 standard; DNA; 15

RESULT 1636

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense eligonucleoride, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFP]-2 or IGFPP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, or inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide is useful for ameliorating the effects of psoriasis, rithyosis, pityriasis, ruba, planis, serborrhoea, keloids, keracosis, neoplasis, soleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, characteristic series, kidney disease, hyperproliferation of the inside of blood to essels or any other hyperplasia
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cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF 1; pityriaais; IGF binding protein; IGFB-2; IGFBF3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 3 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                   Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                           (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 8; Page 86; 201pp; English.
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                                                                                                                                                                                                                                                                                                                     99US-0140345P.
                                                                                                                                                                                                                                                                               21-JUN-2000; 2000WO-AU000693.
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AAF49116 standard; DNA; 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IGP-I oligonucleotide #76
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                                                                                                                                                                                                                                                                                                                                                                                                   Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-041421/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
les 12; Conserv
                                                                                                                                                                                                    WO200078341-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inflammation.
                                                                                                                                                                                                                                                                                                                       21-JUN-1999;
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                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                   Wraight CJ,
                                                                                                                                                                                                                                            28-DEC-2000.
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antidecase oligonucleotide, (for Insulin-like Growth Factor [167]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation.

Inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide of the present invention (see AAF45151 and AAF45153- F45161). The method is useful for ameliorating the effects of psoriasis, cithyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, noplasias, soleroderma, warts, benign growths, cancers of the skin, a hyperpasian or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperplasia
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                                                            Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological; keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis, IGF binding procein, IGFB-2, IGFBP3, inflammation, psoriasis, pilaris, growth factor mediated cell proliferation, ichthyosis; serborrhoea; ruba, keratosis; neoplasia; scleroderma, wart; skin cancer; sclerotic disease; hypermeovascular condition, hyperplasia, kidney disease; neobacular condition, hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 7 A; 3 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                          (MURD-) MURDOCH CHILDRENS RES INST.
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                                                                                                                                                                                                                                                                                                                                                             21-JUN-2000; 2000WO-AU000693
                             IGF-I oligonucleotide #3137.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                  WO200078341-A1.
                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        inflammation
                                                                                                                                                                                                                                                                                                                                                                                                     21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-MAR-2001
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Best Local S
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Gaps

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Page

21-JUN-2000; 2000WO-AU000693

WQ200078341-A1.

28-DEC-2000

Homo sapiens

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]—1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the effects of psoriasis, cligonucleotide which is useful for ameliorating the effects of psoriasis, rothhyosis, pityriasis, ruba, plaris, serborrhoea, keloids, keratosis, neoplasias, soleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, chramping and sease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
skin cancer; sclerotic disease;
kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 1 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
keratosis, neoplasia, scleroderma, wart, hyperneovascular condition, hyperplasia, neovascular condition of the retina, ss.
                                                                                                                                                                                                                                                                                                                                                   Wraight CJ, Werther GA, Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 8; Page 61; 201pp; English.
                                                                                                                                                                                                                                                                                                            (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                               99US-0140345P.
                                                                                                                                                                                                                   21-JUN-2000; 2000WO-AU000693
                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-041421/05.
                                                                                                                               WO200078341-A1.
                                                                                        Homo sapiens.
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0
                                      Gaps
                                        0;
Match 0.5%; Score 10.8; DB 1; Length 15; Local Similarity 85.7%; Pred. No. 9e+02; Local 12; Conservative 0; Mismatches 2; Indels
   Query Match
                                        Matches
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1183 CCCCGCAGAGAGT 1196 14 CCCCACAGCGAGGT 1 ò

standard; DNA; 15 AAF49421 AAF49421

RESULT 1640

BP.

30-MAR-2001 (first entry) AAF49421;

IGF-I oligonucleotide #381.

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological; cardiant, virucide, ophthalmological; keloid; skin disorder, insulin-like Growth Factor. I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keardosis; neophasia; solaroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasis; kidney disease; neovascular condition of the retina; ss.

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AAF53514 standard; DNA; 15

RESULT 1641 AAF53514

IGF-I oligonucleotide #4474.

(first entry)

30-MAR-2001

AAF53514;

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein, IGFB-2; IGFBP3; inflammation, psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

WO200078341-A1

Homo sapiens

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [108]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, of inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide with a present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, chthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keracosis, noplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, disease, kidney disease, hyperproliferation of the inside of blood creating or any other hyperplasia
                                                                                                                                                                                                                                                                                                                             Ameliorating the effects of a disorder, e.g. psoriasis, by administering V (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 4 A; 7 C; 1 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 8, Page 63; 201pp; English.
                                                                                                                                                                                                        (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                              99US-0140345P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CTACAACTACGCCC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match
Best Local Similarity 85.77
Matches 12; Conservative
                                                                                                                                                                                                                                              Werther GA,
                                                                                                                                                                                                                                                                                      WPI; 2001-041421/05
                                                                                                                                                              21-JUN-1999;
                                                                                                                                                                                                                                              Wraight CJ,
qq
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomucleotide, (for Insulin-like Growth Factor [IGF]) receptor, IGF binding protein [IGFBP] - 2 r IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomucleotide which can be used to design the antisense oligomucleotides of the present invention (see AAF4151 and AAF45153 oligomucleotides of the present invention (see AAF4151 and AAF45153 inchthyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, inchthyosis, pityriasis, ruba, pliaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                        Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                    (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                            Example 8; Page 90; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vessels or any other hyperplasia
                                              21-JUN-2000; 2000WO-AU000693
                                                                                        99US-0140345P
                                                                                                                                                                                   Wraight CJ, Werther GA,
                                                                                                                                                                                                                               WPI; 2001-041421/05
                                                                                        :1-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                inflammation
28-DEC-2000
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Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;

Gaps . 0 Score 10.8; DB 1; Length 15; Pred. No. 9e+02; 0; Mismatches 2; Indels 0; 0.5%; Query Match
Best Local Similarity 85.7
Matches 12; Conservative

927 TTTATCCTCCTCT 940 rrrcrcrcrcrcr 15 g

AAF53514 standard; DNA; 15 BP (first entry) 30-MAR-2001 AAF53514; RESULT 1642 AAF53514/

IGF-I oligonucleotide #4474.

Antisense therapy, antiproliferative; antinflammatory, antipsoriatic; cytostatic, dermatological, cardiant, virucide, ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; freeina; ss.

Homo sapiens

WO200078341-A1

28-DEC-2000,

21-JJN-2000; 2000WO-AU000693

99US-0140345P. 21 r JUN - 1999; (MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Edmondson SR;

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 90; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [16ff-1] receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation.

CC inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-CC F45161). The method is useful for ameliorating the effects of psoriaais, ichthyosis, pityriasis, ruba, pilaris, serborthoea, keloids, keratosis, colphyparneovascular condition such as a neovascular condition such as a neovascular condition of the retina, by rain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood covered any other hyperpelasia.

Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;

Gaps . 0 Score 10.8; DB 1; Length 15; Pred. No. 9e+02; 0; Mismatches 2; Indels 0.5%; Query Match
Best Local Similarity 85.7
Matches 12; Conservative

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AAF53515 standard; DNA; 15 BP. AAF53515;

IGF-I oligonucleotide #4475. (first entry) 30-MAR-2001

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic; cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid; skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein, IGFBP-2; IGFBPB3; inflammation; psoriasis; pitaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keardosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasis, kidney disease; neovascular condition; hyperplasis, kidney disease;

Homo sapiens.

WO200078341-A1.

28-DEC-2000

21-JUN-2000; 2000WO-AU000693

99US-0140345P. 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST

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Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological; cardiant; virucide, ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF1:, pitytiasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborinoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasis; kidney disease; neoblasis condition; hyperplasis; kidney disease;
                                                                                                                                                                                                                The present invention relates to a method for ameliorating the effects of sain discorders. The method comprises contacting the skin with an antisense oligomucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomucleotide which can be used to design the antisense oligomucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliotrating the effects of psoriasis, ichthyosis, pityriasis, ruba, pitaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, ruba, pitaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kinney disease, hyperproliferation of the inside of blood
                                                                            Ameliorating the effects of a disorder, e.g. psoriasis, by administering by (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;
  Edmondson SR;
                                                                                                                                                                              Example 8; Page 90; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-JUN-2000; 2000WO-AU000693
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TTCTCTCTCTCT 14
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  GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 85.7
Matches 12, Conservative
  Wraight CJ, Werther
                                      WPI; 2001-041421/05
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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Edmondson SR;

Wraight CJ, Werther GA,

WPI; 2001-041421/05

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P

21-JUN-1999;

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Gaps ·,

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, or inhibiting or reducing growth factor mediated cell proliferation, or inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the affects of psoriasis, refs[6]. The method is useful for ameliorating the effects of psoriasis, indeptyosis, pityriasis, ruba, planis, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, the sain or skin, growth factor—mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological; keloid, skin discorder, insulin-like Growth Factor. I receptor; IGF-1; pityriasis; IGF binding protein, IGFB-2; IGFBP3; inflammation, psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keatoolsis, neophasia; scleroderma; wart, skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis, kidney disease; necobascular condition; hyperplasis, kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ameliorating the effects of a disorder, e.g. psoriasis, by administering W (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 0 A; 3 C; 10 G; 2 T; 0 U; 0 Other;
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                                                                                                         Example 7; Page 45; 201pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200078341-A1.
                                                                 inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-MAR-2001
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                                                                                                                                                                     oligonucleotides of the present invencion (see ARF45151 and AAF45153-
F5161). The method is useful for ameliorating the effects of postrasis,
ichthyosis, pityriasis, ruba, pilaris, serborthoea, keloids, keratosis,
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
hyperneovascular condition such as a neovascular condition of the retina,
brain or skin, growth factor-mediated malignancies, other sclerotic
disease, kidney disease, hyperproliferation of the inside of blood
                                              The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contracting the skin with an antisense oligonuclectide, [for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense
                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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0
                                                                                                                                                                                                                                                                                                                                                                   Score 10.8; DB 1; Length 15;
Pred. No. 9e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 6 A; 6 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Edmondson SR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MURD-) MURDOCH CHILDRENS RES INST.
                  Example 7; Page 50; 201pp; English
                                                                                                                                                                                                                                                                                                  vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF47625 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IGFBP3 oligonucleotide #1045.
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                                                                                                                                                                                                                                                                                                                                                                                                                                        1086 AGGCTTCACCCCCA 1099
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                   1 Similarity 85.7
12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S:
Matches 12
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AAF47625/
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akin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBF]-2 or IGFBF]-3, which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectide which can be used to design the antisense oligonuclectide which can be used to assign the antisense oligonuclectides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, hepplatasis selectoremantal and antiquancies, cancers of the skin, a hyperneovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other selectic disease, hidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin discorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis, IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis, pilaris, growth factor mediated cell proliferation, ichthyosis; serborrhoea; ruba, keratosis, neophasia; scleroderma, wart; skin cancer; sclerotic disease, hypermeovascular condition; hyperplasia, kidney disease; necovascular condition; hyperplasia, kidney disease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; cive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       vessels or any other hyperplasia
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Hes 12; Conservative
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AAF50111/C

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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

The present invention relates to a method for ameliorating the effects of

Example 7; Page 51; 201pp; English.

inflammation.

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Antisense therapy; antiproliferative; antinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; Keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neobascular condition of the retina; ss.
inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, Keloids, keratosis, neoplasias, Scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
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                                                                                                                                                                                                                                                                                 Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                         Sequence 15 BP; 1 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
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                                                                                                                                                                                                  vessels or any other hyperplasia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
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ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperpoliferation of the inside of blood vessels or any other hyperplasia
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                                                                                                                                              Sequence 15 BP; 0 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
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Length 15;

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an anticontection (for Insulin-like Growth Factor [168]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectide of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, inchipyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, the brain or skin, growth factor—mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood wessels or any other hyperplasia
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disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
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                                                                                                                                                                                      Length 15;
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                                                                                                                                                                                  Ouery Match
0.5%; Score 10.8; DB 1;
Best Local Similarity 85.7%; Pred. No. 9e+02;
Matches 12; Conservative 0; Mismatches 2;
                                                                                                              Sequence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                    1084 CCAGGCTTCACCCC 1097
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-JUL-1399;
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                                                                                                                                                                                                                                                                                                                                                                   Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid; skin discorder, Insulin-like Growth Factor. I receptor, IGF-1; pityriasis, IGF binding protein, IGFB-2; IGFBP3; inflammation, psoriasis; pitaris, growth factor mediated cell proliferation, ichthyosis, serborrhoea; ruba, keratosis, neoplasia, scleroderma, wart, skin cancer, sclerotic disease, hyperneovascular condition, hyperplasia, kidney disease; neovascular condition, the retina; ss.
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9e+02;
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                                     Indels
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0.5%; Score 10.8; DB 1;
85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2;
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0.5%; Score 10.8; E
Best Local Similarity 65.7%; Pred. No. 9e+0
Matches 12; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                    IGFBP2 oligonucleotide #1230.
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                                                                             1102 CIGGGCTICAGTCC 1115
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                                       Conservative
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12; Conserv
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                                                                                                                                                                                                                                                          AAF46391;
                       Best Local
                                                                                                                                                                            RESULT 1651
                                       Matches
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ВР.

AAF49376 standard; DNA; 15

RESULT 1653 AAF49376

IGF-I oligonucleotide #336.

(first entry)

30-MAR-2001 AAF49376;

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomuclectide, (for Insulin-11ke Growth Factor [107] - receptor, IGF binding protein [IGFBP] - 2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomuclectide which can be used to design the antisense oligomuclectide which can be used to design the antisense oligomuclectides of the present invention (see AAF45151 and AAF45153 - F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, plaris, serborrhoes, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovacular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense therapy, antiproliferative; antinflammatory, antipsoriatic, cytostatic, dermatological; cardiant, virucide, ophthalmological, Keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scaleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia, kidney disease; neovascular condition; hyperplasia; kidney disease;
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85.7%; Pred. No. 9e+02;
live 0; Mismatches 2; Indels
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762 IGCAGGITTCTTTC 775
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                                                                                                                                                          cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; shin disorder; insulin-like Growth Factor I receptor; IGF-1; pirtyriaals; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neoblastic disease; neoblastic condition; hyperplasia; kidney disease;
                                                                                                                                            Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
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Best Local Similarity 85.7
Matches 12; Conservative
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RESULT 1654 AAF53878/c

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Gaps ô

1236 AGCCCTCGCCTCCG 1249

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15

12; Conservative

Matches

Local Similarity

Query Match

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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                  Antisense therapy, antiproliferative, antinflammatory, antipsoriatic; cytostatic; dermatological; cardiant, virucide, ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; pitatis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasis, kidney disease; neovascular condition; hyperplasis, kidney disease;
                                                                                                                                                                                                                                                                                                                                                                             Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                   (MURD-) MURDOCH CHILDRENS RES INST.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            vessels or any other hyperplasia
 ВP
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                                                                          GF-I oligonucleotide #4838
 AAF53878 standard; DNA; 15
                                                   (first entry)
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                                                 30-MAR-2001
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The present invention relates to a method for ameliorating the effects of akin disorders. The method comprises contacting the skin with an antisense Oligonucleotide, (for Insulin-like Growth Factor [IGF] receptor, IGF binding protein [IGFBP] - or IGFBP3, which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45153 oligonucleotides of the present invention (see AAF45151 and AAF45153 olichthyosis, pityriasis, ruba, pilaris, serborthoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovacular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood

Sequence 15 BP; 3 A; 7 C; 3 G; 2 T; 0 U; 0 Other;

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Gaps
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Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
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787 GAGIGICICCIG 800

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AAF46489 standard; DNA; 15 RESULT 1655 AAF46489, # X X X #

AAF46489

BP.

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Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, shi disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis; pitaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperaneovascular condition; hyperplasis, kidney disease; neobascular condition; hyperplasis, kidney disease;
                                                                                                                                                                                                                                                                  Edmondson SR;
                                                                                                                                                                                                                                           (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                         99US-0140345P.
                   IGFBP2 oligonucleotide #1328.
                                                                                                                                                                                                   21-JUN-2000; 2000WO-AU000693
(first entry)
                                                                                                                                                                                                                                                                  Werther GA,
                                                                                                                                                                                                                                                                                     WPI; 2001-041421/05.
                                                                                                                                                          WO200078341-A1.
                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                         21-JUN-1999;
30-MAR-2001
                                                                                                                                                                                                                                                                  Wraight CJ,
                                                                                                                                                                               28-DEC-2000
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 6; Page 42; 201pp; English

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, [for Insulin-like Growth Factor [IGP] - ceceptor, IGF binding protein [for Insulin-like Growth Factor [IGP] - ceceptor, IGF binding protein [for Insulin-like Growth Factor [IGF] - ceceptor, IGF binding protein [for Insulin-like Growth Factor [IGF] - ceceptor, IGF binding protein [for Insulin-like Growth is capable of inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the artisense oligonucleotide which can be used to design the artisense oligonucleotide is useful for ameliorating the effects of psoriasis, F45161). The method is useful for ameliorating the effects of psoriasis, cichthyosis, pityriasis, ruba, pilaris, serborrhoes, keloids, keratosis, neoplasias, scleroderma, wats, benign growths, cancers of the skin, a hyperneovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood cessels or any other hyperplasia

Sequence 15 BP; 0 A; 1 C; 10 G; 4 T; 0 U; 0 Other;

Gaps ö 0.5%; Score 10.8; DB 1; Length 15; S5.7%; Pred. No. 9e+02; Ve 0; Mismatches 2; Indels 85.7%; 12; Conservative Best Local Similarity Matches 12; Conserv Query Match

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ВЪ AAF50110 standard; DNA; 15 14 cceaccacaacccc 1 RESULT 1656 AAFS0110/G
ID AAFS0
XX
AC AAFS0
XX
DT 30-W
XX
XX
XX 심 δ

1247 CCGACCCCATCCCC 1260

30-MAR-2001

AAF50110;

IGF-I oligonucleotide #1070

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Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilaris; growth factor mediated cell proliferation, ichthyosis; serborrhoea; ruba, keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition, hyperplasis, kidney disease; neoblasis, condition, hyperplasis, kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to a method for ameliorating the effects of antisense cligonucleotide, (for Insulin-like Growth Factor [IGP] antisense cligonucleotide, (for Insulin-like Growth Factor [IGP]) are receptor, IGF binding protein [IGPBP] -2 or IGFBP3), which is capable inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-P45161). The method is useful for ameliocrating the effects of psoriasis, ichthyosis, pityriasis, ruba, pitaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a necvascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                           (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 8; Page 67; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   vessels or any other hyperplasia
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                                                                                                                                                                                                                                                                                                                                       21-JUN-2000; 2000WO-AU000693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-041421/05
                                                                                                                                                                                                                                                  WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammation.
                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                   21-JUN-1999;
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ô . 0 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels 12; Conservative Similarity Query Match Local Matches

Sequence 15 BP; 2 A; 3 C; 2 G; 8 T; 0 U; 0 Other;

IGF-I oligonucleotide #1861. AAF50901 standard; DNA; 15 (first entry) 30-MAR-2001 AAF50901; RESULT 1657

ВР

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis, IGF binding protein, IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an anticopacification in the skin with an creeptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectide of the present invention (see AAF45151 and AAF45153- F45161). The method is useful for ameliorating the effects of psoriasis, cichthyosis, pityriasis, ruba, pilaris, serbortnicea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hypernecvascular condition such as a neovascular condition of the retina, chean in growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperplasia ö Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation. Antisense therapy, antiproliferative; antinflammatory; antipsoriatic; cytostatic; dermatological, cardiant; virucide; ophthalmological, keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein; IGFB-2; IGFBP3; inflammation; psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; kearcosis; neoplasia; soleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasis, kidney disease; neovascular condition; hyperplasis; kidney disease; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss. Gaps . 0 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; 2; Indels iive 0; Mismatches 2; Indels Sequence 15 BP; 4 A; 4 C; 2 G; 5 T; 0 U; 0 Other; Edmondson SR; (MURD-) MURDOCH CHILDRENS RES INST. Example 8; Page 73; 201pp; English. AAF52179 standard; DNA; 15 BP. 21-JUN-2000; 2000WO-AU000693. 1064 ACCCAAGCTTCAGT 1077 IGF-I oligonucleotide #3139. 1 AccaArGerreagr 14 30-MAR-2001 (first entry) Best Local Similarity 85.7 Matches 12, Conservative Wraight CJ, Werther GA, WPI; 2001-041421/05. WO200078341-A1. 21-JUN-1999; Homo sapiens 28-DEC-2000. AAF52179; Query Match RESULT 1658 AAF52179, 8 셤

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomuclectide which can be used to design the antisense oligomuclectides of the present invention (see AAF45151 and AAF45153-4F45161). The method is useful for ameliotacting the effects of psoriesis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovacular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, hyperprovacular condition of the retina, disease, hyperprovacular condition of the retina,
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                                                                                                                                                                                                                                                                                                                                           Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 96+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 4 A; 3 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                        Edmondson SR;
                                                                                                                                                                                    (MURD-) MURDOCH CHILDRENS RES INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 8; Page 84; 201pp; English
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                                                                              21-JUN-2000; 2000WO-AU000693
                                                                                                                                99US-0140345P
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                                                                                                                                                                                                                                        Werther GA,
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                                                                                                                                                                                                                                                                                             WPI; 2001-041421/05
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                                                                                                                                                                                                                                                                                                                                                                                                                                     inflammation.
                                                                                                                                21-JUN-1999;
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                                                                                                                                                                                                                                           Wraight CJ,
                          28-DEC-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an artisense oligonuclectide, (for Insulin-IRe Growth Factor [167].

receptor, 1GF binding protein [167BP]-2 or 167BP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF4151 and AAF45153-F4561). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pitaris, serborrhoea, keloids, keratosis, hoppinasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovacular condition uch as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerolic conditions the property of the inside of blood
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                          Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 8; Page 81; 201pp; English.
                                                                                                                                                                                                                                                                                                  (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vessels or any other hyperplasia
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                                                                                                                                                                                          21-JUN-2000; 2000WO-AU000693
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Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                       Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-041421/05
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                             Homo sapiens.
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RESULT 16 AAF52634/

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                present invention relates to a method for ameliorating the effects of
                                                                                                                                                                                                    Edmondson SR
                                                                                                                     (MURD-) MURDOCH CHILDRENS RES INST.
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                                       99US-0140345P.
                                                                                                                                                                                                CJ, Werther GA,
                                                                                                                                                                                                                                                                                   WPI; 2001-041421/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inflammation.
                                       21-JUN-1999;
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0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; 1ive 0; Mismatches 2; Indels 12; Conservative Similarity Query Match Local Matches

Sequence 15 BP; 1 A; 0 C; 13 G; 1 T; 0 U; 0 Other;

BP. 1089 CTTCACCCCCACCC 1102 AAF45495 standard; DNA; 15 15 CTCCCCCCCACC 2 RESULT 1661 AAF45495 à g

IGFBP2 oligonucleotide #334. (first entry) 30-MAR-2001 AAF45495;

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic; dermatological, cardiant, virucide; ophthalmological, keloid, skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea, ruba, keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; se.

21-JUN-2000; 2000WO-AU000693 WO200078341-A1. 28-DEC-2000

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P 21~JUN-1999;

The present invention relates to a method for ameliorating the effects of skin disorders. The method comparises contacting the skin with an antisense oligomucleotide, (for Insulan-like Growth Factor [IGP]) receptor, IGF binding protein [IGFBP] or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, oligomucleotide which can be used to design the antisense oligomucleotides of the present invention (see AAF45151 and AAF45153 oligomucleotides of the present invention (see AAF45151 and AAF45153 idhthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, idhthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or Gaps ö 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels Sequence 15 BP; 2 A; 7 C; 5 G; 1 T; 0 U; 0 Other; Edmondson SR; Example 6; Page 36; 201pp; English. vessels or any other hyperplasia Conservative Werther GA, WPI; 2001-041421/05. Query Match Best Local Similarity Matches 12; Conserv inflammation. CJ, Wraight

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1286 GCGCCCACAAGCCA 1299 2 GCGCCCCATGCCA 15 d

à

GFBP3 oligonucleotide #182. (first entry) 30-MAR-2001 AAF46762;

묤.

AAF46762 standard; DNA; 15

RESULT 1662 AAF46762/c

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, kaloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein, IGFB-2; IGFBP3; inflammation, psoriasis; pilaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keatosis, neoplasia; scloroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia, kidney disease; neovascular condition of the retina; sa.

21-JUN-1999; 99US-0140345P. 21-JUN-2000; 2000WO-AU000693. WO200078341-A1 Homo sapiens.

Edmondson SR; Wraight CJ, Werther GA, WPI; 2001-041421/05

(MURD-) MURDOCH CHILDRENS RES INST.

inflammation

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Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant; virucide, ophthalmological, keloid, skin discorder, Insulin-like Growth Factor. I receptory, IGF-1, pityriasis, IGF binding procein, IGFBP-2, IGFBP3, inflammation, psoriasis, pilaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis; neoplasia; scleroderma; wart, skin cancer, sclerotic disease, hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                        The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-1ke Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliotrating the effects of psoriasis, ichthyosis, pityriasis, ruba, pitaris, serborrhoea, keloids, keratosis, chophasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a necovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
               Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 0 A; 5 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Edmondson SR;
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                                                                                                                      Example 7; Page 45; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               vessels or any other hyperplasia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1231 GCGACAGCCCTCGC 1244
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200078341-A1.
                                                                                inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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AAF47078
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Gaps

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The present invention relates to a method for ameliorating the effects of antisense origonucleotide, (for Insulan-like Growth Factor [IGP]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide of the present invention (see AAF4151 and AAF45153-P45161). The method is useful for ameliorating the effects of psoriasis, inchipyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a neovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 2 A; 8 C; 4 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MURD-) MURDOCH CHILDRENS RES INST.
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                                     Example 7; Page 47; 201pp; English
                                                                                                                                                                                                                                                                                                                                                                    vessels or any other hyperplasia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAF52692 standard; DNA; 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 85.7
Matches 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1664
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [GRF]) is receptor, IGF binding protein [GFBP]-2 or IGFBP], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the affects of psoriasis, FASIGI). The method is useful for ameliorating the effects of psoriasis, chthyosis, pityriasis, ruba, pllaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
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Sequence 15 BP; 4 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

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             0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels
                                                                      999 TGGGAAATCGACAC 1012
Query Match
Best Local Similarity 85./.,
Thes 12; Conservative
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Gaps

AAF53240 standard; DNA; 15 (first entry) 30-MAR-2001 AAF53240; 1665 RESULT

IGF-I oligonucleotide #4200.

ВР.

Antisense thexapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic; dermatological; cardiant, virucide, ophthalmological; keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding procein, IGFBF-2; GFBP3; inflammation, psoriasis; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neobascular condition; hyperplasia; kidney disease;

Homo sapiens.

WO200078341-A1.

28-DEC-2000

21-JUN-2000; 2000WO-AU000693.

99US-0140345P. 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Wraight CJ, Werther GA,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 88; 201pp; English.

ō The present invention relates to a method for ameliorating the effects can skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF] 1 receptor, IGF binding protein [IGFBP] 2 or IGFBP3), which is capable of

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inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an objectnucleoride which can be used to design the antisense of objectnucleorides which can be used to design the antisense of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, inhthyosis, pityriasis, thus, pilaris, serborthoea, keloids, keratosis, neoplasis, soleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, bain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperpoliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin discorder, Insulin-like Growth Factor. I receptor, IGF-1, pityliasis; IGF binding protein, IGFBP-2, IGFBP3, inflammation, psoriasis, pilaris, growth factor mediated cell proliferation, ichthyosis, serborrhoea; ruba, keardosis, neoplasia, scleroderma, wart, skin cancer, sclerotic disease, hyperneovascular condition; hyperplasia, kidney disease; necovascular condition of the retina, ss.
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                                                                                                                                                                                                                               0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                    Sequence 15 BP; 2 A; 0 C; 12 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                CTTCACCCCCACCC 1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IGF-I oligonucleotide #4837.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                             CTCCCCCCCACCC 1
                                                                                                                                                                                                                                                               12; Conservative
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF53877;
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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Edmondson SR;

Wraight CJ, Werther GA, WPI; 2001-041421/05

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P.

21-JUN-1999;

21-JUN-2000; 2000WO-AU000693.

WO200078341-A1. Homo sapiens.

28-DEC-2000.

Example 8; Page 92; 201pp; English

οŧ The present invention relates to a method for ameliorating the effects skin disorders. The method comprises contacting the skin with a antiense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectides of the present invention (see AAF45151 and AAF45153-

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F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition euch as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
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8888888888888

Sequence 15 BP; 3 A; 6 C; 4 G; 2 T; 0 U; 0 Other;

ó Gaps ö ch 0.5%; Score 10.8; DB 1; Length 15; 1 Similarity 85.7%; Pred. No. 9e+02; 12; Conservative 0; Mismatches 2; Indels Query Match Best Local 9 Matches

787 GAGTGTGTCTCCTG 800 GAGTGTGTCGCCAG 2 13 à

AAF45496 standard; DNA; 15 BP AAF45496; RESULT 1667

(first entry) 30-MAR-2001

IGFBP2 oligonucleotide #335.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pitrylassis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease;

Homo sapiens

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

99US-0140345P. 21-JUN-1999;

(MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 6; Page 36; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomucleotide, (for Insulan-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB9]-2 or IGFB93), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inhibiting or reducing growth factor mediated cell proliferation, oligomucleotide which can be used odesign the antisense oligomucleotide which can be useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serbornhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina,

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligomicleotide, (for Insulin-like Growth Factor [168]-1 receptor, IGF binding protein [1678]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligomicleotide which can be used to design the antisense oligomicleotide which can be used to design the AT45151 and AAP45133-0190nucleotide of the present invention (see AAF45151 and AAP45153-1019 prothyosis, pityriasis, rubar, plaris, serborrhoea, keloids, keratosis, inapplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Example 8; Page 70; 201pp; English.

inflammation.

Edmondson SR;

Werther GA,

G,

Wraight

WPI; 2001-041421/05.

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P.

21-JUN-1999;

21-JUN-2000; 2000WO-AU000693.

WO200078341-A1.

28-DEC-2000.

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Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1, pityriasis; IGF binding procein, IGFBP-2, IGFBP3, inflammation, psoriasis, pitaris, growth factor mediated cell proliferation, ichthyosis; serborrhoea; ruba, keratosis; neophasia; soloroderma; wart, skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia, kidney disease; neobascular condition of the retna; ss.
                                                                                                 Gaps
brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
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                                                                        DB 1; Length 15;
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9e+02;
hes 2; Indels
                                                Sequence 15 BP; 2 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
                                                                      0.5%; Score 10.8; Di
85.7%; Pred. No. 9e+0
ive 0; Mismatches
                                                                                                                       1286 GCGCCCACAAGCCA 1299
                                                                                                                                                                                                                                                                                  IGF-I oligonucleotide #1531.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor. I receptor; IGF-1; pityriasis; IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, kearcosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to a method for ameliorating the effects of sin discorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]) receptor, IGF binding protein [IGFBP] 2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF4151 and AAF45153-F45161). The method is useful for ameliotating the effects of psoriasis, ichthyosis, pityriasis, ruba, plaris, serborrhoea, keloids, keratosis, ichthyosis, pityriasis, ruba, plaris, serborrhoea, keloids, keratosis, hyperneovascular condition such as a neovascular condition of the retina, brain or skih, growth factor-mediated malignancies, other sclaeroic condition such as a neovascular condition of the retina, brain or skih, growth factor-mediated malignancies, other sclaeroic condition such as a neovascular condition such as a neovascular condition such as a neovascular condition of the retina, brain or skih, growth factor-mediated malignancies, other sclaeroic condition such as a neovascular condition of the retina, brain or skih, growth factor-mediated malignancies, other sclaeroic
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                                                                                         Gaps
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0
                                           3; DB 1; Length 15;
9e+02;
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                                                                                       2; Indels
Sequence 15 BP; 4 A; 9 C; 1 G; 1 T; 0 U; 0 Other;
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Pred. No. 9e+02;
                                         0.5%; Score 10.8; D
85.7%; Pred. No. 9e+0
live 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Edmondson
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 8; Page 63; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vessels or any other hyperplasia
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                                                                                                                                                                                                                                                                                   AAF49420 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                               IGF-I oligonucleotide #380.
                                                                                                                                                                     1 Accrecaceae 14
                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-041421/05.
                                                              Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                    30-MAR-2001
                                                                                     12;
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                                           Query Match
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                                                                                                                                                                                                                                     RESULT 1669
                                                                                     Matches
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Best Local Similarity

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [108]-1 receptor, IGF binding protein [formalin-like Growth Factor [108]-1 inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, robthyosis, pityriasis, ruba, plaris, serborrhoea, keloids, keratosis, reoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, chramping sease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
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                                                                                                                                                                                                   AAF47832 standard; DNA; 15
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Hes 12; Conservative
CTACAACTACGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-041421/05
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AAF50900 standard; DNA; 15 AAF50900 RESULT

AAF50900;

30-MAR-2001

(first entry)

IGF-I oligonucleotide #1860.

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin discorder, Insulin-like Growth Factor I receptor; IGF-1, pityriasis, IGF binding protein, IGFBP-2, IGFBP3, inflammation, psoriasis; pilaris, growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba, keratosis; neophasia; scleroderma, wart, skin cancer; sclerotic disease, hyperneovascular condition, hyperplasia; kidney disease;

WO200078341-A1.

28-DEC-2000.

21-JJN-2000; 2000WO-AU000693.

99US-0140345P. 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Werther GA, 5

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Example 8; Page 73; 201pp; English.

akin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insuln-1ks Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonuclectide which can be used to design the antisense oligonuclectide which can be used to design the antisense oligonuclectide of the present invention (see AAP45151 and AAP45153-155161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, plaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood The present invention relates to a method for ameliorating the effects of vessels or any other hyperplasia

Sequence 15 BP; 4 A; 5 C; 2 G; 4 T; 0 U; 0 Other;

0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ive 0; Mismatches 2; Indels Conservative Local Similarity tes 12; Conserv Query Match Best Loca Matches

1064 ACCCAAGCTTCAGT 1077

ACCAATGCTTCAGT 15

RESULT 1672

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Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid; skin discorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neobascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                  Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                         (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 8; Page 93; 201pp; English.
AAF53972 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                              21-JUN-1999; 99US-0140345P.
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                                                                             IGF-I oligonucleotide #4932
                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                  Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-041421/05.
                                                                                                                                                                                                                                                    WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             inflammation.
                                                                                                                                                                                                                          Homo sapiens.
                                                   30-MAR-2001
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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, of inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an inflammation and/or other disorders. The present sequence is an inflammation is useful for ameliorating the effects of psoriasis, chinyosis, pityriasis, ruba, pitaris, serborrhoea, keloids, keratosis, neoplasis, soleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperpoliferation of the inside of blood wessels or any other hyperplasia

Sequence 15 BP; 5 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

ö 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels 12; Conservative Query Match Best Local Similarity Matches

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AAF52960 standard; DNA; 15 BP. AAF52960,

RESULT 1673

AAF52960;

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]. receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliotating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, hepplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, hyperproliferation of the inside of blood
                                                                                        Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic; dermatological; cardiant; virucide, ophthalmological; keloid; skin disorder, Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneowascular condition; hyperplama; kidney disease; neobascular condition; hyperplama; sidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
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Pred. No. 9e+02;
0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Edmondson SR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vessels or any other hyperplasia
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                                                      IGF-I oligonucleotide #3920
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                    (first entry)
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Best Local Similarity
                                                                                                                                                                                                                                                                                                    WO200078341-A1.
                    30-MAR-2001
                                                                                                                                                                                                                                                                  Homo sapiens.
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Matches
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AAF70011/
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AC AAF7
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DT 18-A
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The present sequence is a probe used to detect polymorphisms in the human osteoclastogenesis inhibitory factor (TNFRSF11B). Polymorlectides comprising one or more of twenty four novel single nucleotide polymorphisms in the TNFRSF1B gene have been identified. TNFRSF1B regulate osteoclast recruitment and function. An understanding of rariations in the gene should thus be useful in developing new therapies for metabolic disorders caused by abnormal osteoclast recruitment and function auch as osteoporosis, metaefatic bone disease, Paget's disease, rheumatoid arthritis and periodontal bone disease
                                                                                                                                                                                                                                                                                                                                                                         Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's disease and rheumatoid arthritis.
             Human, TNFRSF11B; osteoclastogenesis inhibitory factor;
single nuclectide polymorphism; SNP; osteoclast recruitment;
osteoclast function; osteoporosis; metastatic bone disease;
Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO;
allele-specific oligonucleotide; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    single nucleotide polymorphism; SNP; osteoclast recruitment; osteoclast function; osteoporosis; metastatic bone disease; Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                           Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFRSF11B; osteoclastogenesis inhibitory factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 1 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human TNFRSF11B gene ASO probe, SEQ ID NO: 103.
                                                                                                                                                                                                                                                                                                           Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      allele-specific oligonucleotide; probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 15; Page 23; 114pp; English.
                                                                                                                                                                                                                                                                          (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                           Duda A,
                                                                                                                                                                                                            10-JUL-2000; 2000WO-US018803
                                                                                                                                                                                                                                             99US-0143020P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-JUL-2000; 2000WO-US018803
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                                                                                                                                                                                                                                                                                                           Denton RR,
                                                                                                                                                                                                                                                                                                                                        WPI; 2001-147175/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200104137-A1
                                                                                                                                          WO200104137-A1
                                                                                                                                                                                                                                           09-JUL-1999;
                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
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                                                                                                                                                                                                                                                                                                           Chew A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1675
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Human INFRSF11B gene ASO probe, SEQ 1D NO: 67.

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Gaps

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The present sequence is a probe used to detect polymorphisms in the human osteoclastogenesis inhibitory factor (TMFRSF11B). Polymucleorides comprising one or more of twenty four novel single nucleotide polymorphisms in the TMFRSF11B gene have been identified. TMFRSF11B regulate osteoclast recruitment and function. An understanding of variations in the gene should thus be useful in developing new therapies for metabolic disorders caused by abnormal osteoclast recruitment and function such as osteoporosis, metastatic bone disease, Paget's disease, rheumatoid arthritis and periodontal bone disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is a probe used to detect polymorphisms in the human osteoclastogenesis inhibitory factor (TMRSF11B). Polymoleotides comprising one or more of twenty four novel single nucleotides polymorphisms in the TMRSF11B gene have been identified. TMRSF11B regulate osteoclast recruitment and function. An understanding of variations in the gene should thus be useful in developing new therapies for metabolic disorders caused by abnormal osteoclast recruitment and function such as osteoporosis, metastatic bone disease, reget's disease, rheumatoid arthritis and periodontal bone disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's disease and rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, TNFRSF11B; osteoclastogenesis inhibitory factor; single mucleotide polymorphism; SNP; osteoclast recruitment; osteoclast incrion; osteoporosis; metastatic bone disease; Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO; allele-specific oligonucleotide; probe; ss.
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                                                                                                                                                                                                                                                                                       Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence 15 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                Sequence 15 BP; 4 A; 3 C; 1 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human TNFRSF11B gene ASO probe, SEQ ID NO: 75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Duda A, Nandabalan K,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 15; Page 23; 114pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                   919 CTTTGCCTTTTATC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF70019 standard; DNA; 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200104137-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1677
AAF70019
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                                                                                                                                                                                                                                                                                                                                  The present sequence is a probe used to detect polymorphisms in the human osteoclastogenesis inhibitory factor (TNRRSF11B). Polymucleotides comprising one or more of twenty four novel single nucleotide polymorphisms in the TNRRSF1B gene have been identified. TNRRSF1B regulate osteoclast recruitment and function. An understanding of variations in the gene should thus be useful in developing new therapies for metabolic disorders caused by abnormal osteoclast recruitment and function and as osteoporosis, metastatic bone disease, Paget's disease, rheumatoid arthritis and periodontal bone disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's disease and rheumatoid arthritis.
                                                                                                                                                                                                  Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's disease and rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, TNFRSF11B, osteoclastogenesis inhibitory factor;
single nucleotide polymorphism; SNP; osteoclast recruitment;
osteoclast function; osteoporosis, metastatic bone disease;
Paget's disease; rheumatoid arthritis; periodontal bone disease;
allele-specific oligonucleotide; probe; ss.
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                                                                                                             Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 3 A; 3 C; 2 G; 7 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human TNFRSF11B gene ASO probe, SEQ ID NO: 105.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Duda A, Nandabalan K,
                                                                                                          Duda A, Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
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                                                                                                                                                                                                                                                                                           Claim 15; Page 23; 114pp; English
                                                                 (GENA-) GENAISSANCE PHARM INC.
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                     99US-0143020P
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                                                                                                          Denton RR,
                                                                                                                                                    WPI; 2001-147175/15.
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                     09-JUL-1999;
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                                                                                                             Chew A,
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AAH28531

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Detection; probe; diagnosis; oral disease; paradontitis; caries; therapy; polymorphism; virulence factor; antibiotic resistance gene; prognosis; oral infection; detection; pathogen; coronary heart disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes a method of detecting a target virus using fluorescence resonance energy transfer (FRST), involving reacting with a labelled probe formed between at least two same energy donor fluorescent pigments and an energy acceptor fluorescent pigment in which the energy from the former is relayed to the latter successivally and transferred. The probe can be used for the detection of a target virus. The present sequence is a probe described in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               energy donor fluorescent pigments (dfp) and an energy acceptor fluorescent pigment (afp) in which the energy from (dfp) is relayed to (afp) successively and transferred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Detecting a virus comprises a probe formed between at least two same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ive 0; Mismatches 2; Indels
                                                                              labelled probe;
                                                                                                                                                                                                                        /*tag= a
/mod_base= OTHER
/note= "modified by Bodipy493/503"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 5 A; 3 C; 2 G; 5 T; 0 U; 0 Other;
                                                                              detection probe, FRET; labelle resonance energy transfer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 10; 40pp; Japanese
                                                                                                                                                                                Location/Qualifiers
                                       Target virus detection probe #11
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(revised)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diabetic symptom; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human herpesvirus 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-400707/43.
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Best Local Similarity
Matches 12; Conserv
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06-AUG-2003
09-JAN-2003
                                                                              Target virus
fluorescence
                                                                                                                                                                                                                                                                                                                                                                                       16-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                 04-MAR-1999;
  19-SEP-2001
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                                                                                                                                           Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention provides the protein, cDNA and genomic sequences of human intersleukin-13 [ILI3], and describes the single mucleotide polymorphisms (SNPs) found within the gene, which is found on chromosome 5q31. ILI3 is a pro-inflammatory cytokine thought to be involved in the pathogenesis of asthma and other immune and inflammatory diseases. The ILI3 sequences and the SNPs identified can be used in drug screening, to determine an individual's susceptibility to disease, in forensic and paternity testing, and to identify reatments for cancer, immune and inflammatory diseases, including ashma and diseases characterised by fibrosis. The present sequence is an ILI3 allele-specific oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                 Human, interleukin-13, ILL3; single nucleotide polymorphism; SNP; cancer; inflammation; immune disorder; cytokine; asthma; chromosome 5q31; fibrosis; forensic; disease susceptibility; drug screening; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel polynucleotide comprising single nucleotide polymorphisms in human interleukin-13 gene is useful for studying expression and function of interleukin-13, as well as diagnosing and treating cancer, inflammatory, and immune disorders.
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                                                                                                                                                                                                                                                                                                                              Human interleukin-13 allele specific oligonucleotide #17.
                     Indels
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                     3
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  Pred. No. 9e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 15, Page 19; 85pp; English.
                     0;
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                                                                                                                                                                                                        AAH28531 standard; DNA; 15 BP.
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82.78;
                                                          1047 TAAGCCCCTGGCCC 1060
                                                                                                                                                                                                                                                                                     (first entry)
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                        12; Conservative
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                                                                                                TAAGTCCCTGGGCC
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Best Local Similarity
  Best Local Similarity
Matches 12; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-SEP-1999;
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Gaps

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RESULT 1679 AAH46690/c

SXXX

Matches

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Producing copies of specific nucleic acids in vitro, without the need of intermediate structures, useful for determining if samples have come from living or dead organisms.
                                                                                                                                                                                                                                                  The present invention describes a method for detecting the presence of polymorphisms associated with inflammatory bowel diseases such as ulcerative colitis and crohn's disease. The methods can be used to detect the presence of genetic polymorphisms associated with inflammatory bowel disease and correlating their occurrence with disease states. They may be used in this way for phenotypic correlations, forensics, paternity testing, medicine and genetic analysis. The present sequence is a polymorphic site described in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 M13mp18; living organism; dead organism; nucleic acid copying; isostatic condition; temperature; buffer; ionic strength; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a method for producing, in vitro, copies
                                                                                                                                                    Testing for the presence of polymorphisms associated with inflammatory bowel disease, using a hybridization assay.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Score 10.8; DB 1; Length 15; 80.0%; Pred. No. 9e+02; 1ve 0; Mismatches 3; Indels
                                                                        Siminovitch K;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 4 A; 5 C; 4 G; 1 T; 0 U; 1 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 M13mp18 nucleotide sequence PCR primer #7.
                                                                            Rioux J,
               WHITEHEAD INST BIOMEDICAL RES. ELLIPSIS BIOTHERAPEUTICS CORP.
                                                                                                                                                                                                                      Claim 1; Page 75; 463pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Fig 6; 41pp; English.
                                                                            Lander ES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF59241 standard; DNA; 15 BP.
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Ω
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RABBANI E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 80.0°
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-202468/20.
                                                                            Hudson TJ,
                                                                                                                 WPI; 2001-367874/38.
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26-APR-2001
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(RABB/)
(DONE/)
                 (WHED ) (ELLI-) 1
                                                                            Daly M,
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                                                                                                                                                                                                                                                                                                                                                           This invention describes a novel nucleotide carrier with probes used for diagnosis of oral diseases, particularly paradontitis, but also caries, especially to identify genetic predisposition (as indicated by polymorphisms) to disease and to identify causative microorganisms or their associated virulence factors and antibiotic resistance genes, e.g. for selection of therapy and for prognosis. They are also useful for research into oral infections. The carriers allow simultaneous detection of both host and pathogen parameters, providing quickly and simply an individual's paradontitis profile, including detection of pathogens that aggravation of minimarsased risk of coronary heart diseases and/or aggravation of most compary heart diseases and/or aggravation (Updated on 06-AUG-2003 to correct OS field.) (Updated
                                                                                                                                                                                                                                                               Oligonucleotide array, useful for diagnosing oral diseases, particularly paradontitis, carries human or microbial reference sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, inflammatory bowel disease, Crohn's disease, ulcerative colitis; single nuclectide polymorphism; SNP; chromosome 19p13; paternity test; chromosome 5q31-33; forensic test; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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"SNP, optionally T or C at this position"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 4 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        on 11-SEP-2003 to standardise OS field)
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                                                                                                                                                                                                                                                                                                                             Claim 8; Page 23; 58pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH91789 standard; DNA; 15 BP.
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10-APR-2000; 2000US-0196046P.
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13-MAR-2001; 2001DE-02010013.
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                                                                              13-MAR-2001; 2001DE-02010013
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/note=
                                                                                                                                                                                                                        WPI; 2001-65777/76.
                                                                                                                                                                                 (ROET/) ROETGER A.
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DE20110013-U1.
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                                         18-OCT-2001
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Gaps ö

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of a specific nucleic acid. The process does not require the use of intermediate structures for the production of the nucleic acid. The method comprises: (a) providing a nucleic acid sample containing the specific sequence; (b) contacting the sample with a mixture containing: (i) nucleic acid precursors; (ii) specific nucleic acid primars, each complementary to a distinct region of the sequence; and (iii) a nucleic acid producing catalyst; and (c) allowing the mixture to react under isostatic conditions of temperature, buffer and ionic strength. The method can be used for producing copies of specific nucleic acids in vitro. The process can be used to determine if a specific target nucleic acid was derived from a living or deceased organism. The present sequence represents a PCR primer for the Milmpils nucleotide sequence which is used in an example from the present invention. (Updated on 11-SEP-2003 to
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Sequence 15 BP; 9 A; 1 C; 4 G; 1 T; 0 U; 0 Other;

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Gaps
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0
      Score 10.8; DB 1; Length 15;
Pred. No. 9e+02;
0; Mismatches 2; Indels
         0.5%;
Query Match
Best Local Similarity 85.74
These 12; Conservative
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780 AGAAAACGAGTGTG 793 1 AGAAAACGAGAATG 14 ò d

AAF70325 RESULT 16 AAF70325/

AAF70325 standard; DNA; 15 (first entry) 20-APR-2001

Human; dopamine receptor D2; DRD2; polymorphism; allele specific; drug target isogene; detection; single nucleotide polymorphism; SNP; genotype; schizophrenia; Parkinson's disease; myoclonus dystonia; MD; Human DRD2 allele specific oligonucleotide primer SEQ ID NO:68. probe; PCR primer; ss.

Homo sapiens.

WO200105832-A1.

25-JAN-2001.

19-JUL-2000; 2000WO-US019644.

19-JUL-1999; 99US-0144493P.

(GENA-) GENAISSANCE PHARM INC.

Stephens JC; Duda A, Nandabalan K, Denton RR, WPI; 2001-091967/10 Chew A,

Polymucleotides comprising single nucleotide polymorphisms in the human dopamine receptor D2, useful for detecting mutations associated with, e.g. schizophrenia, Parkinson's and myoclonus dystonia.

Claim 15; Page 23; 135pp; English.

The present invention describes polynucleotides comprising single mucleotide polymorphisms (SNPs) in the human dopamaire receptor D2 (DRD2). The polynucleotides may be used in assays to detect and characterise polymorphisms in DRD2 that affect its expression and activity and are prolymorphisms in DRD2 that affect its expression and activity and are involved in disorders such as schlizophrenia, Parkinson's and myoclonus dystonia (MD). This information would be useful for studying the biological function of DRD2 as well as in identifying drugs targeting this protein for the treatment of disorders related to its abnormal expression or function. Polymorphisms in the DRD2 gene affect the expression of active and functional polypeptides. Therefore it is

Score 10.8; DB 1; Length 15; Pred. No. 9e+02;

Sequence 15 BP; 1 A; 9 C; 3 G; 2 T; 0 U; 0 Other;

0.5%;

Query Match Best Local Similarity

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The present invention relates to polymorphisms of the human interleukin 4 receptor-alpha gene (IL4R-alpha; see AAF57718 for the reference sequence). Polymorphica comprising polymorphic gene variants are useful for therapeutic purposes. For example, where a patient may benefit from expression of a particular IL4Ralpha protein isoform, an expression vector encoding the isoform may be administered to the patient. It may desirable to decrease or block expression of a particular IL4Ralpha protein isoform, and the appression of a particular IL4Ralpha isogene, which may be done by turning off by transforming a targeted organ, tissue or cell population with an expression vector that expresses high levels of untranslatable mRMA for the isogene. Specific therapeutics identified by these methods may be useful for allergic diseases. The present sequence is a probe for human IL4R-alpha
advantageous to detect polymorphisms in the DRD2 gene and how those polymorphisms are combined in different copies of the gene. AAF70261 to AAF70305 represent human DRD2 allele specific oligonucleotide probes, and AAF70309 to AAF70404 represent human DRD2 allele specific oligonucleotide primers which are used in the detection of DRD2 polymorphisms. AAF70405 propresent oligonucleotide primers for the detection of human DRD2 polymorphisms which are given in the exemplification of human DRD2 polymorphisms which are given in the exemplification of the present invention. AAF70453 to AAF70538 represent PCR primers for the human DRD2 gene which are used in examples from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated polynucleotide useful for the identification of therapeutics
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                                                                                                                                                                                                                                   Match 0.5%; Score 10.8; DB 1; Length 15; Local Similarity 85.7%; Pred. No. 9e+02; nes 12; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                                                  Sequence 15 BP; 1 A; 2 C; 8 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 15; Page 44; 188pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human IL4Ralpha gene probe #94
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allergic disease; probe; ss.
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                                                                                                                                                                                                                                                                                                                     14 GACTCAGGCACCAC 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF69454 standard; DNA; 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200104270-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1684
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AAF73891;

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The present invention relates to a polymorphic variant of a reference sequence for the solute carrier family 6 neurotransmitter transporter, serotronin member 4 (SLC6A4) gene or a fragment of it or a sequence complementary to the first sequence. The invention is used in producing a recombinant organism that can be used to express SLC6A4 for protein structure analysis and binding studies. A composition comprising a genotyping oligonuclectide is used to detect a polymorphism in the SLC6A4
Solute carrier family 6 neurotransmiter transporter, sectonin 4; SLC6A4; genotyping; allele specific oligonuclectide; ss.
                                                                                                                                                                                                                                                                                                                                      New isolated polynucleotide comprising a polymorphic variant for the solute carrier family 6 neurotransmitter transporter, serotonin member gene for identifying drugs for treating disorders related to expression
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                                                                                                                                                                                                                                                                    Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
ive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 4 A; 7 C; 2 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                        Sanchis A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Guehrs K;
                                                                                                                                                                                                                                                                        자,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conrad U, Grosse F,
                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 12; Page 21; 152pp; English.
                                                                                                                                                                                                                                                                      Nandabalan
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                                                                                                                                                                                                                                    (GENA-) GENAISSANCE PHARM INC
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24-OCT-2000; 2000DE-01053478.
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                                                                                                                                                                 2000WO-US020638.
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                                                                                                                                                                                                                                                                                                          WPI; 2001-123317/13
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Best Local Similarity
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of the protein.
                                                                                             WO200109161-A1
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                                                            Homo sapiens
                                                                                                                                                                                                     29-JUL-1999;
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                                                                                                                               08-FEB-2001
                                                                                                                                                                                                                                                                          Denton RR,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to a polymorphic variant of a reference sequence for the solute carrier family 6 neurotransmitter transporter, serotonin member 4 (SLC6A4) gene or a fragment of it or a sequence complementary to the first sequence. The invention is used in producing a recombinant organism that can be used to express SLC6A4 for protein structure analysis and binding studies. A composition comprising a genotyping oligonucleotide is used to detect a polymorphism in the SLC6A4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated polynucleotide comprising a polymorphic variant for the solute carrier family 6 neurotransmitter transporter, serotonin member 4 gene for identifying drugs for treating disorders related to expression
                                                                                                                                                                                                                                                                                                            Solute carrier family 6 neurotransmiter transporter; sectonin 4; SLC6A4; genotyping; allele specific oligonuclectide; ss.
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           Gaps
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85.7%; Pred. No. 9e+02;
iive 0; Mismatches 2; Indels
           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human SLC6A4 allele-specific oligonucleotide primer #33
                                                                                                                                                                                                                                                                             Human SLC6A4 allele-specific oligonucleotide primer #11
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           Mismatches
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                                                                                                                                                                       BP.
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                                                                                                                                                                         AAF73891 standard; DNA; 15
                                                                                                                                                                                                                                             (first entry)
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             Conservative
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                                               1236 AGCCCTCGCCTCCG
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             12;
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RESULT 1686

Query Match

Local

Best Loca Matches

AAF73913

AAF73913 ID AAF XX AC AAF XX DT 30-2 XX XX XX

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Gaps

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comprises amplifying specific DNA fragment in ribosomal RNA intergene

26; 31pp; English.

Claim 1; Col

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WPI; 2002-123561/17.
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This invention describes a novel DNA sequence, encoding a synthetic spider silk protein, comprising modules, each comprising a group of sequentially arranged oligonucleotide encoding a repeating unit of a spidroin protein. Psynthetic protein has at least sproduce synthetic fibres, films and/or membranes, particularly: (i) sproduce synthetic fibres, films and/or membranes, particularly: (i) for medical use, especially to close wounds and/or to support or cover artificial organs; (ii) as adhesion surfaces for culturing cells; and artificial organs; (ii) as adhesion surfaces for culturing cells; and (iii) as filters. The synthetic proteins are very similar to native spider silk proteins; can be prepared on a large scale and can be spun to fibres with excellent mechanical properties (strength and elasticity). Also they retain water solubility after long-term boiling in aqueous continuous and since they are also soluble in organic solvents but precipitated at high salt concentration, they are easily extracted and purified. The modular construction of the invention facilitates continuous and surfaces and continuous encourage of additional peptide-encoding sequence represents a N. culturing continuous continu
New DNA encoding synthetic spider silk protein, useful e.g. for closing wounds, comprises modules that encode repeating units of spirodoin
                                                                                                                                                                                                                                                                                                                                                                      Claim 2; Page 14; 88pp; German.
                                                                                                                                                                                                      proteins.
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0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; 9e+02; Thes 2; Indels Sequence 15 BP; 5 A; 8 C; 0 G; 2 T; 0 U; 0 Other; 0; Mismatches 1127 CCACCTTCACCTCC 1140 2 ccaccaraaccrcc 15 12; Conservative Local Similarity Query Match Matches ò

Gaps ;

> ABK97317 standard; DNA; 15 BP. (first entry) #323 5S-C PCR primer #1. 07-CCT-2002 ABK97317; RESULT 1688 ABK97317

Strain identification method; prokaryote; eukaryote; ribosomal DNA; HCR; highly conserved region; Highly variable region; HVR; bacterium; methicillin-resistant Staphylococcus aureus; nosocomial infection; 88; DNA fingerprinting; pathogenic bacteria; infection control; PCR; primer; restriction fragment length polymorphism; RFLP; 16s rRNA; 23s rRNA; 5S.

Synthetic.

US6395475-B1 28-MAY-2002.

93US-00064596. 95US-00461210. 35-JUN-1995; 18-MAY-1993;

(UYFL) UNIV FLORIDA STATE.

Whitehouse E, Leggett CG,

Reeves RH;

WPI; 2002-556092/59.

Identifying strain of prokaryote or individual of eukaryote, useful in clinical laboratories for strain identification of pathogenic bacteria,

The present invention relates to a new method of identifying strain of prokaryote or individual of eukaryote. This method involves amplifying a prokaryote or individual of eukaryote. This method involves amplifying a prokaryote or the HOR of DNA filanks a highly variable region (HVR) of eukaryote, where the HOR of DNA sequences which are labelled, and fragments that are separated fragmented to yield labelled, amplified DNA ragments that are separated breathors as that prokaryote or eukaryote or entaryote or an electrophoresis so that prokaryote or eukaryote or entaryote or an entaryote or an entaryote or entaryote or an entaryote or entaryote or an entaryote or entaryote. The method is prokedine or of infections, and for identifying species, sub-species and the differences between the individuals of the sub-species of the same species. The differences between e.g. bacterial strains involved in e.g. nosocomial or expect to a eukaryote. The method is sensitive enough to detect of entaryote individuals of the sub-species of the same species. The expect of DNA. The methods are beneficial in clinical laboratorie, because they allow for rapid strain identification of pathogenic bacterial DNA is analysis, and completed sequence or provides results with great speed e.g. a proliminary screen by agarcse or provides results with great speed e.g. a proliminary screen by agarcse or completed 5-6 hours after receiving hospital isolates. The method or fragment the spread of nosocomial infection control personnel with adequate information to contain and prevent the spread of nosocomial infections, rather than having analysis (RPLP) The speed of the methods of the invention, as described above. ò . 0 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels Sequence 15 BP; 2 A; 1 C; 8 G; 4 T; 0 U; 0 Other; Query Match Matches

1252 CCCATCCCCAACCC 1265 15 CCCATCCCGAACTC 2 Local Similarity 85.7 tes 12; Conservative ઠે g

ABK97489 standard; DNA; 15 (first entry) 07-OCT-2002 ABK97489; RESULT 1689 ABK97489

Human LCAT gene polymorphism detection ASO probe #12.

Lecithin-cholesterol acyltransferase; LCAT; Norum disease; gene therapy; fish-eye disease; atherosclerotic cardiovascular disease; forensic; population diversity; anthropological lineage; paternity testing; human; polymorphism; allele-specific oligonucleotide; ASO; probe; ss.

Homo sapiens.

WO200253575-A1.

11-JUL-2002

03-JAN-2001; 2001WO-US000092.

03-JAN-2001; 2001WO-US000092

05-NOV-2001; 2001WO-US047441 07-OCT-2002 04-JUL-2002. Chew A, RESULT 1690 ABL59300 В

Novel isolated polymorphic variant polynucleotide of lecithin-cholesterol acyltransferase gene, useful for studying expression and biological function of the gene, and for therapeutic, diagnostic or forensic Stephens JC; Nandabalan K, Claim 16; Page 17; 72pp; English. (GENA-) GENAISSANCE PHARM INC. WPI; 2002-557737/59 purposes.

The present invention relates to a new polynucleotide comprising a nucleotide sequence which is a polymorphic variant of a reference sequence which is a polymorphic variant of a reference sequence for lecithin-cholesterol acyltransferase (LCAT). The invention is useful for identifying an association between a trait (preferably a clinical response to drug targeting LCAT) and at least one genotype or haplorype of LCAT gene. The method of the invention has applicability in developing diagnostic tests and therapeutic treatments for Norum disease, fish-eye disease and atherosclerctic cardiovascular disease. The haploryping and genotyping methods are useful for studying population diversity, anthropological lineage, the significance of diversity and lineage at the phenotypic level, paternity testing, forensic applications and a read association between the LCAT genetic variation and a trait such as level of drug response or susceptibility to disease. In addition, the methods for identifying the LCAT paplotypes present in addition, the methods for identifying the LCAT paplotypes in a condition with a specific disease, e.g. Norum disease, will facilitate the development of drugs targeting the LCAT haplotypes in a population with a specific disease, e.g. Norum disease, will facilitate the development of drugs targeting the LCAT isoform(s) that are most regerents one of a collection (ABMSy44B-ABMSy441) of allele specific represents one of a collection (ABMSy44B-ABMSy441) of allele specific oligonucleotide (ASO) probes that were used in the invention to detect colymorphisms in the human LCAT gene

Sequence 15 BP; 1 A; 2 C; 7 G; 5 T; 0 U; 0 Other;

Gaps .. 0 Score 10.8; DB 1; Length 15; Pred. No. 9e+02; 2; Indels 0; Mismatches 0.5%; Query Match Best Local Similarity 85.7³ Matches 12, Conservative

ABL59300 standard; DNA; 15 BP.

ASO probe for platelet activating factor receptor gene.

(first entry)

Human; platelet activating factor receptor; PTAFR; isogene; cancer; chromosome 1; inflammatory disease; coronary disease; probe; ss.

Homo sapiens.

WO200251859-A2.

03-NOV-2000; 2000US-0245633P.

(GENA-) GENAISSANCE PHARM INC

'n Koshy Choi JY, Chew A,

WPI; 2002-566672/60.

screening New genetic variants comprising haplotypes of the human Platelet Activating Factor Receptor (PTAFR) gene, useful for treating or scre drugs for treating e.g. inflammatory diseases, coronary diseases or comprising haplotypes of the human Platelet

Claim 15; Page 13; 59pp; English.

The present sequence represents an allele-specific oligonucleotide (ASO) probe which is used for detecting polymorphisms in the human platelet activation as PSI-5 to designate the order in which they are located to as PSI-5 to designate the order in which they are located in the gene. Six isogenes of the PTARR gene exist. The PTARR gene is located on chromosome 1, and contains 1 exon. Polymorphisms PSI and PSS have previously been identified. PSI and PSS cocur in the coding region. The polymorphisms polymorphisms in the PTARR gene is useful in screening candidate drugs to treat diseases related to PTARR activity, e.g. inflammatory diseases, coronary diseases or cancer. The PTARR isogenes are especially useful for treating these diseases. The methods and haplotypes are useful in improving the efficiency of drug discovery and development processes, or for designing clinical trials of candidate drugs for treating the specific condition or disease described

Sequence 15 BP; 0 A; 1 C; 3 G; 10 T; 0 U; 1 Other;

Gaps .. ch 0.5%; Score 10.8; DB 1; Length 15; I Similarity 85.7%; Pred. No. 9e+02; 12; Conservative 0; Mismatches 2; Indels Query Match Best Local Similarity Matches 12; Conserv

δ g

ABA98716 standard; DNA; 15 ABA98716

RESULT 1691

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ABA98716;

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(first entry) 13-MAY-2002

PNA FRET probe #5.

PNA; FRET; probe; nucleic acid amplification; peptide nucleic acid; fluorescence resonance energy transfer; disease diagnosis; food-borne pathogen detection; microbial detection; allelic discrimination; genotyping; gene expression analysis; ss.

Synthetic.

/mod_base= OTHER /note== "OTHER= dabcyl-E" 'note = "OTHER = FAM-O" Location/Qualifiers base= OTHER 'mod_base= OTHER '*tag≈ b *tag= Key modified_base modified_base

WO200194638-A2

13-DEC-2001

06-JUN-2001, 2001WO-US018464

06-JUN-2000; 2000US-0209883P.

Chen C,

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The present invention relates to a method for amplifying nucleic acid.

The method comprises annealing a primer (PI) to first strand (S1) of denatured target nucleic acid (dNA) at annealing temperature (T1);

catending P1 at T1 or extension temperature (E1) to generate doublestended (ds) nucleic acid, annealing primer (P2) to second strand (S2) of dNA at annealing temperature (T2); extending P2 to generate double.

Cof dNA at annealing temperature (T2); extending P2 to generate double.

Cof dNA at annealing temperature (T2); extending P2 to generate double.

Cof dnaturing target danA into S1 and S2. A probe hybridisation step may be incorporated into the cycle. A detectable probe is annealed to S2 of denatured target uncleic and s2. A probe hybridisation enthod is useful for amplifying target nucleic acid, preferably a plasmid, cDNA, amplicon, genomic DNA, restriction digest or a ligation product, or a target comprising single nucleotide polymorphisms. The asynchronous PCR cycle has utility in nuclease cleavage assay with a cleaving DNA flucrescence resonance energy transfer (PRET) probe, in assays for human disease diagnosis, food-borne pathogen detection and microbial detection, for allelic discrimination of target DNA, and in genotyping and gene expression analysis. The present sequence is a PNA PRET probe, which was used to illustrate real-time detection of
                                                                                                                                                                                                                                                                                                                                               nucleic acid, involves two annealing and two extension steps employing two primers which differ in their thermal melting temperatures.
                                                                                                                                                                                                                                                                                                                     Novel asynchronous thermal cycling method for amplification of target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
0.5%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 9e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                           Example 7; Page 41; 87pp; English.
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99JP-00242693.
2000JP-00028896.
                              06-JUN-2001; 2001WO-US018464.
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                                                                              06-JUN-2000; 2000US-0209883P.
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ABA97658 standard; DNA; 15
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                                                                                                                                                          (APPL-) APPLERA CORP.
                                                                                                                                                                                                                                                                     WPI; 2002-216734/27.
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30-AUG-1999;
01-FEB-2000;
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ABA97658/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to a method for amplifying nucleic acid.

The method comprises annealing a primer (P1) to first strand (S1) of denatured target nucleic acid (ANA) at annealing temperature (T1).

Stranded (ds) nucleic acid, annealing primer (P2) to second strand (S2) of ANA at annealing temperature (T2); extending P2 to generate doublestranded (ds) nucleic acid, annealing primer (P2) to second strand (S2) of ANA at annealing temperature (T2); extending P2 to generate dsNA; chanturing target dsNA into S1 and S2. A probe hybridisation step may be incorporated into the cycle. A detectable probe is annealed to S2 of construct target nucleic acid at a probe hybridisation step may be incorporated into the cycle. A detectable probe is annealed to S2 of construct target nucleic acid, preferably a plasmid, cDNA, amplicon, genomic DNA, restriction digest or a ligation product, or a target comprising single nucleotide polymorphisms. The synchronous PCR cycle has utility in nuclease cleavage assay with a cleaving DNA flucrescence resonance energy transfer (FRET) probe, in assays for human disease diagnosis, food-borne pathogen detection and microbial detection, for allelic discrimination of target DNA, and in genotyping and gene expression analysis. The present sequence is a PNA PRETER PRODE, which was used to illustrate real-time detection of
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                                                                                                                                                          Novel asynchronous thermal cycling method for amplification of target nucleic acid, involves two annealing and two extension steps employing two primers which differ in their thermal melting temperatures.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 4 A; 8 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= b
/mod_base= OTHER
/note= "OTHER= dabcyl-E"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'note= "OTHER= FAM-O"
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                                                                                                                                                                                                                                                                     Example 7; Page 41; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABA98716 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1134 CACCTCCAGCTCCA 1147
                                                        Egholm M, Haff L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ceccaccaecreca 15
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(APPL-) APPLERA CORP.
                                                                                                           WPI; 2002-216734/27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            asynchronous PCR
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
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RESULT 1692 ABA98716/

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Gaps

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The invention relates to a method for amplifying a nucleic acid using a Single Primer Amplification (SPA). The method comprises synthesising a capplate nucleic acid containing a predetermined sequence and hairpin a tructure with the nested oligonoclecicle excension reaction. The method structure with the nested oligonoclecicle for amplifying a nucleic acid, preferably for amplifying a capple of family of related nucleic acid sequences to build a complex library of capples encoded by the sequences. The engineered nucleic acid strand to polypeptides encoded by the sequences. The engineered nucleic acid strand caid with a predetermined sequence engineered onto its first end, a sequence complementary to the predetermined sequence and a hairpin structure between them and contacting the engineered onto its first end, a structure between them and contacting the engineered and a hairpin structure between them and contacting the engineered and entition such a portion of the predetermined sequence. This process is done in the presence of a polymerase and concludes under conditions suitable for polymerisation to produce a complementary nucleic acid strand. The method of the invention is useful for producing large amounts of a target nucleic acid sequence and for amplifying simultaneously more than one different target nucleic acid
and for identifying associations between AGTR2 genetic variations and a trait such as levels of drug response or susceptibility to disease. It is useful in developing diagnostic tests and therapeutic treatments for eardiovascular disorders, congenital abnormalities of kidney and urinary tract (CAKUT) and premature ovarian failure (POF). The invention is useful in gene therapy. The present sequence is an allele-specific oligonuclectide (ASO) primer used to detect human AGTR2 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Amplifying nucleic acid by synthesizing template nucleic acid containing a predetermined sequence and hairpin structure and using the template for target amplification by Single Primer Amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Single Primer Amplification; nested oligonucleotide extension reaction; hairpin; SPA; library; ds.
                                                                                                                                                                                                                                                                                                0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lin Y, Mcwhirter J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human IgM heavy chain gene related oligo SEQ ID No 49.
                                                                                                                                                                                                                                                  Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Barbas-Frederickson S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 3; Page 21; 54pp; English
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19-SEP-2001; 2001US-0323400P.
                                                                                                                                                                                                                                                                                                                                                                                                                  995 TTTGTGGGAAATCG 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABT06035 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrretregapacce 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                     polymorphisms
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-OCT-2002
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                                                                                                                                                                                                                                                                                                            Query Match
Best Local 9
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                                                                                                                                                                                                                                                                                                                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to genetic variants of human angiotensin receptor 2 (AGTR2) isogenes and methods for detecting variants of AGTR2 gene. Polynuclectides of the invention are useful in studying the expression and biological function of AGTR2 and in developing drugs targetting AGTR2 protein. Methods of the invention are useful for studying population diversity, anthropological lineage, the significance of diversity and lineage at the phenotypic level, paternity testing, forensic applications
                                                                                                                                                                                                     Measurement of nucleic acids, using a nucleic acid probe and analysis of
                                                                                                                                                                                                                                                                                                                                     This invention relates to a method for measuring nucleic acids using a nucleic acid probe labelled with a fluorochrome. The nucleic acid probe decreases the fluorescence of the fluorochrome when hybridised with a target nucleic acid, the decrease in the fluorescence is measured. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; angiotensin receptor 2; forensic application; drug response; AGTR2; congenital abnormality of kidney and uninary tract; CAKUT; cardiovascular disorder; premature ovarian failure; gene thorapy; POF; polymorphism; ASO; allele-precific oligonucleotide; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     method can be used for measuring a target nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human AGTR2 gene polymorphism detecting ASO primer #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 0 A; 9 C; 0 G; 6 T; 0 U; 0 Other;
                                                                             KANKYO ENG KK.
KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chew A, Choi JY, Koshy B, Stephens JC;
                                                                                                                                                                                                                                                                                          Example 7; Page 19; 34pp; Japanese.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAD43773 standard; DNA; 15 BP.
                                                BIOINDUSTRY KYOKAI SH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          32-FEB-2001; 2001WO-US003620.
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                                                                                                                                                       WPI; 2002-134193/18
                                                                                                                                                                                                                                       the obtained data
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                                                   (BIOI-)
                                                                                                      (KEIZ-)
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AAD43773

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0000000**x8x5x8x5x8x8x8x8x8x8x8x8x8x8**

Maruyama T;

Length

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Query Match 0.5%; Sc.
Best Local Similarity 85.7%; Pr.
Matches 12; Conservative 0;
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                                                                                                                                                                                                30-OCT-2002
                                                                                                                                                                                                                                                                                            Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_RNA
                                                                                                                                                                          AAD41883;
                                                                                                                            RESULT 1697
                                                                                                                                          AAD41883,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comprises at least three 3.5' linked nucleosides or their salts. At least one internucleoside linkage is not a phosphodiester linkage and at least one nucleoside comprises a base. Sequences of the invention are useful to binding to a DNA duplex target sequence via either CT or GT triplex helix binding motif and in antisense therapies. They are also used for treating diseases caused by viruses and for diagnostic applications to detect viral infections, bacterial infections and diseases such as cancers. The oligomers are also used as primers, in the treatment of pathological conditions associated with inflammatory conditions, cardiovascular disorders, immune reactions and bacterial infections and for modulating target gene expression. They are also useful in gene therapy. The present sequence is a target DNA used in the exemplification
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                                                                                                                                                                                                                                                                                                         Antisense therapy, infection, cardiovascular disorder, immune reaction, gene therapy, virucide, cytostatic, antibacterial, antiinflammatory,
sequence located on the same or different nucleic acid molecules. This polynucleotide sequence represents an oligonucleotide relating to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
                                                                                                        Gaps
                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gutierrez AJ;
                                                                            Match 0.5%; Score 10.8; DB 1; Length 15; Local Similarity 85.7%; Pred. No. 9e+02; es 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                 Target DNA #2 used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T; 0 U; 0 Other;
                                                         G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 3; Col 39; 106pp; English.
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92US-00935444.
92US-00965941.
92US-00976103.
                                                                                                                                                                                                                 В.
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                                                         Sequence 15 BP; 2 A; 9 C; 2
                                                                                                                                839 GCCTACCCCAGATT 852
                                                                                                                                                     1 GCCTCCCCAGACT 14
                                                                                                                                                                                                                 AAD41859 standard; DNA; 15
                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wagner R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PHARM INC.
                                                                                                                                                                                                                                                                                                                        gene therapy; virucic cancer; cardiant; ds.
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25-AUG-1992;
23-OCT-1992;
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Pudlo J;
                                                                                                                                                                                                                                                                                                                                                           Unidentified.
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14-NOV-1994;
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                                                                                    Query Match
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Matches
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/mod base= OTHER
/mote= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 30 in the sequence
listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 30 in the sequence
listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= c
/mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 30 in the sequence
listing"
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/note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 30 in the sequence
listing"
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ID NO: 30 in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mod_base= CTHER
/note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 30 in the sequence
listing"
                                                                                                                                                                                                                                                                                                                                                                                                      Antisense therapy, infection; cardiovascular disorder; immune reaction; gene therapy; virucide; cytostatic; antibacterial; antiinflammatory; cancer; cardiant; RNA-DNA hybrid; ss.
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                 ON-25 oligonucleotide used in the exemplification of the invention.
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/note= "3'-thioformacetal linkage (3',5')"
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/mod_base= OTHER
/mod_base= (1-propynyl) -2'-deoxyuridine:
given as N in the sequence shown as SEQ
sequence listing"
                                           Indels
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mod_base= OTHER
not== "3'-thioformacetal linkage
Score 10.8; DB 1
Pred. No. 9e+02;
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                          BP
                                                                                       1016 AAAAAGAGGGGAG 1029
                                                                                                                                                                                                                                       AAD41883 standard; DNA; 15
                                                                                                                              14
                                                                                                                                                                                                                                                                                                                               (first entry)
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                                                                                                                                1 AAAAAGAGAGAGAG
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Gutierrez AJ;

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The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comprises at least three 3.-5. linked nucleosides or their salts. At least one internucleoside linkage is not a phosphodiester linkage and at least one internucleoside linkage is not a phosphodiester linkage and at least one nucleoside comprises a base. Sequences of the invention are useful of the invention active one nucleoside of the invention are useful of the invention and diseases such as treating diseases caused by viruses and for diagnostic applications to detect viral infections and diseases such as cancers. The oligomers are also used as primers, in the treatment of pathological conditions associated with inflammatory conditions.

The rappy, The present sequence is a target RNA used in the exemplification
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/mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine; This base is given as
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                                                                                                                                                                                                                                                                           New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ON-6 oligonucleotide used to generate triple helix structures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.5%; Score 10.8; DB 1; Length 1 Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 2; Indels Matches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 10 A; 0 C; 5 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                           Jones RJ,
                                                                                                                                                                           Wagner R, Mattencci M,
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/mod base= OTHER
91US-00799B24.
92US-00935444.
92US-00965941.
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                                                               92US-00976103
94US-00338352
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                                                                                                                                   (ISIS-) ISIS PHARM INC
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modified_base
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                       25-AUG-1992;
23-OCT-1992;
25-NOV-1992;
14-NOV-1994;
                                                                                                                                                                             Froehler B,
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                                                                                                                                                                                                    Pudlo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1699
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comprises at least three 3.-5. Innked nucleosides or their salts. At least one internucleoside linkage is not a phosphodiester linkage and at least one internucleoside linkage is not a phosphodiester linkage and at least one nucleoside comprises a base. Sequences of the invention are useful for inhiding to a DNA duplex target sequence wit a either or or off triplex theix binding motif and in antisense therapies. They are also used for treating diseases caused by virtuses and for diagnostic applications to detect viral infections, bacterial infections and diseases such as cancers. The oligomers are also used as primamatory conditions, cardiovascular disorders, immune reactions and bacterial infections and therapy. The present sequence is an oligonucleotide useful in gene therapy. The present sequence is an oligonucleotide useful in the
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                                                                                                                                                                                                                                                                                                                                                                                             New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
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85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                           Jones RJ,
                                                                                                                                                                                                                                                                                           Mattencci M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; Col 51; 106pp; English.
                                                                                                                                   92US-00935444.
92US-00965941.
92US-00976103.
94US-00338352.
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                                                                   96US-00599738
                                                                                                                91US-00799824
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                                                                                                                                                                                                                                                                                           Wagner R,
                                                                                                                                                                                                                                                 PHARM INC
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23-OCT-1992;
25-NOV-1992;
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                                                                      12-FEB-1996;
                                                                                                                                                                                                                                                                                           Froehler B,
                                                                                                                                                                                                       14-NOV-1994;
                            30-APR-2002
                                                                                                                26-NOV-1991
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                                                                                                                                                                                                                                                                                                                  Pudlo J;
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The present invention relates to novel cligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comprises at least three 3 -5. linked nucleosides or their salts. At least one internucleoside linkage is not a phosphodiester linkage and at least one internucleoside linkage is not a phosphodiester linkage and at least one internucleoside comprises a base. Sequence of the invention are useful of the invention are useful of the invention of the invention are useful the invention of the invention are useful of the invention o
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/*nod base OTHER
//node = 0THER
//note= "5-methyl-2'-deoxycytidine; This base is given as
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"note= "5-methyl-2'-deoxycytidine; This base is given as
in the sequence shown as SEQ ID NO: 31 in the sequence
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"mod base= OTHER
'note= 15-methyl-2'-deoxycytidine; This base is given as
in the sequence shown as SEQ ID NO: 31 in the sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense therapy, infection, cardiovascular disorder, immune reaction, gene therapy, virucide, cytostatic, antibacterial, antiinflammatory, cancer, cardiant, RNA-DNA hybrid, ss.
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85.7%; Pred. No. 9e+02;
ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 0 A; 5 C; 0 G; 5 T; 5 U; 0 Other;
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Best Local Similarity 85.7
Matches 12; Conservative
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/mod_base= OTHER
/note= "5-(3-methyl-1-butynyl) uracil; This base is given
as N in the sequence shown as SEQ ID NO: 8 in the
sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
/noce= "5-(3-methyl-1-butynyl) uracil; This base is given
as N in the sequence shown as SEQ ID NO: 8 in the
sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label= RNA
/note= "5-(3-methyl-1-butynyl) uracil; This base is given
as N in the sequence shown as SEQ ID NO: 8 in the
                                                                                                                                                                                                                                                                                                                                                       /note= "5-(3-methyl-1-butynyl) uracil; This base is given as N in the sequence shown as SEQ ID NO: 8 in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "5-methyl-2'-deoxycytidine, This base is given as N in the sequence shown as SEQ ID NO: 8 in the sequence listing"
                                                                                                         mod_base= OTHER
note= "5-methyl-2'-deoxycytidine; This base is given as
In the sequence shown as SEQ ID NO: 8 in the sequence
            N in the sequence shown as SEQ ID NO: 8 in the sequence listing"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "5-(3-methyl-1-butynyl) uracil; This base ias N in the sequence shown as SEQ ID NO: 8 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gutierrez AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Jones RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wagner R, Mattencci M,
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                                                                                                                                                                                                                                                                                                                                                                                                             sequence listing"
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/mod_base= OTHER
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/label= RNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-AUG-1992
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25-NOV-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pudlo J;
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Antisense therapy, infection; cardiovascular disorder; immune reaction; gene therapy; virucide; cytostatic; antibacterial; antiinflammatory; cancer; cardiant; RNA-DNA hybrid; 88.
                                                                                                   ON-2 oligonucleotide used to generate triple helix structures
                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                Key
modified_base
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25-NOV-1992;
14-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US6380368-B1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-NOV-1991;
25-AUG-1992;
                                                    30-OCT-2002
                                                                                                                                                                                                                                                                                        Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-APR-2002
AAD41855;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomere comprises at least three 3.5' linked nucleosides or their salts. At least one internucleoside linkage is not a phosphodiester linkage and at least one nucleoside comprises a base. Sequences of the invention are useful to binding to a DNA duplex target sequence via either CT or GT triplex helix binding motif and in antieense therapies. They are also used for treating diseases caused by viruses and for diagnostic applications to detect viral infections, bacterial infections and diseases such as cancers. The oligomers are also used as primers, in the treatment of pathological conditions associated with inflammatory conditions, cardiovascular disorders, immune reactions and acterial infections and for modulating target gene expression. They are also useful in gene therapy. The present sequence is an oligomucleotide used in the
                                                                                                                                            This base is
ID NO: 31 in the
N in the sequence shown as SEQ ID NO: 31 in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gutierrez AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
cive 0; Mismatches 2; Indels
                                                                                                            /mod_base= orHER //mod_base= orHER //mod_base= orHER //mote= '/mote= '/mote= '/mote= '/mote= '/mote //mod_base                                                                                                                                                                                                                                                                                                                                                                             /*tag= h
/mod_base= OTHER
/note= "Formacetal linkage (3',5')"
                                                                                                                                                                                                                                                                                                                    'note = "Formacetal linkage (3',5')"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 0 A; 5 C; 0 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jones RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wagner R, Mattencci M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; Col 51; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             therapy. The present sequence is exemplification of the invention
                                                                                                                                                                                                                                                                  /*tag= g .
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91US-00799824.
92US-00935444.
92US-00965941.
92US-00976103.
94US-00338352.
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Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                   .14
                               isting"
                                                           11. .14
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                                                                                                                                                                                                                                      modified_base
                                                                                                                                                                                                                                                                                                                                                      nodified base
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25-NOV-1992;
14-NOV-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Froehler B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US6380368-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-NOV-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-APR-2002
                                                              misc_RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pudlo J;
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/*tag= a
/mod_base= OTHER
/mote= "5-methyl-2'-deoxycytidine; This base is given as
/note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 2 in the sequence
listing"
                                                                                                                                                                                                                   /mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 2 in the sequence
                                                                                                                                                                                                                                                                              /*tag= c
/mod_base= CTHER
/mod= "5-methyl-2'-deoxycytidine; This base is given as
Not the sequence shown as SEQ ID NO: 2 in the sequence
listing"
                                                                                                                                                                                                                                                                                                                                                              given as
                                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 2 in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                          /noce= "S.methyl-2'-deoxycytidine, This base is given as N in the sequence shown as SEQ ID NO: 2 in the sequence listing"

11. 15. 15. **

/*tag= f
/*label= RNA**
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New oligomers useful for binding to DNA duplex target sequence and fo treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            These bases ID NO: 2 in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gutierrez AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "5-(1-propymyl)-2'-deoxyuridine;
given as N in the sequence shown as SEQ
sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Jones RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wagner R, Mattencci M,
                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                     'mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    91US-00799824.
92US-00935444.
92US-00965941.
92US-00976103.
94US-00338352.
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                                                                                                                                                                                                                                                                                                                                                                                    isting"
                                                                                                                                                                                                                                                        isting"
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                                                                                                                                                                                                                                                                                                                                                                                                            *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-535437/57.
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Pudlo J;
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Gaps

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RESULT 1701 AAD41855/c ID AAD41855 standard; DNA; 15 BP. XX

1016 AAAAGAGGGGAG 1029

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15 AAAAAGAGAGAGAG 2

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The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comprises at least three 3.-5. Linked nucleosides or their salts, At least one internucleoside linkage is not a phosphoditester linkage and at least one internucleoside linkage is not a phosphoditester linkage and at least one internucleoside comprises a base. Sequences of the invention are useful for hinding to a DNA duplex target sequence via either CT or GT triplex treating diseases caused by virtues and for diagnostic applications to detect viral infections, bacterial infections and diseases such as cancers. The oligomers are also used as primers, in the treatment of pathological conditions associated with inflammatory conditions, cardiovascular disorders, immune reactions and bacterial infections and complexing target gene expression. They are also useful in gene therapy. The present sequence is an oligomucleotide used to generate duplex.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antisense therapy; infection; cardiovascular disorder; immune reaction; gene therapy; virucide; cytostatic; antibacterial; antiinflammatory; cancer; cardiant; DNA-RNA hybrid; ss.
  /note= "5-(1-propynyl)-2'-deoxycytidine; This base is given as N in the sequence shown as SEQ ID NO: 5 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ON-36 oligonucleotide used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                           Gutierrez AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5%; Score 10.8; DB 1; Length 15;
llarity 85.7%; Pred. No. 9e+02;
Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                           Froehler B, Wagner R, Mattencci M, Jones RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sxample 3; Col 39; 106pp; English.
                                                                                                                                                                                                                                       91US-00799824.
92US-00935444.
92US-00965941.
92US-00976103.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1016 AAAAAGAGGGGAG 1029
                                                                                                                                                                                                 96US-00599738
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
pase=
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                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-535437/57.
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hes 12; Conserv
                                                                                                                                                                                                                                                               25-AUG-1992;
23-OCT-1992;
25-NOV-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-OCT-2002
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                                                                                                           JS6380368-B1
                                                                                                                                                                                                 12-FEB-1996;
                                                                                                                                                    30-APR-2002.
                                                                                                                                                                                                                                               26-NOV-1991;
                                                                                                                                                                                                                                                                                                                                     14-NOV-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pudlo J;
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Matches
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g
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                                   The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comprise at least three 3'-5' linked nucleosides or their salts. At least one internucleoside linkage is not a phosphodiester linkage and at least one internucleoside linkage is not a phosphodiester linkage and at least one nucleoside comprises a base. Sequences of the invention are useful for inhaling motifications at a sequence via either or or off triplex helix binding motifications they are also used for treating diseases caused by viruses and for diagnostic applications to detect viral infections and diseases such as cancers. The oligomers are also used as primers, in the treatment of pathological conditions associated with inflammatory conditions, cardiovascular disorders, immune reactions and bacterial infections and conditions to modulating target gene expression. They are also useful in gene therapy. The present sequence is used in the exemplification of triple helix structures. This sequence is used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= d
/mod_base= OTHER
/note= "5-(1-propynyl)-2'-deoxycytidine; This base is
given as N in the sequence shown as SEQ ID NO: 5 in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antisense therapy; infection; cardiovascular disorder; immune reaction; gene therapy; virucide; cytostatic; antibacterial; antiinflammatory; cancer; cardiant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "5-(1-propynyl)-2'-deoxycytidine; This base is given as N in the sequence shown as SEQ ID NO: 5 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note== "5-(1-propynyl)-2'-deoxycytidine; This base is given as N in the sequence shown as SEQ ID NO: 5 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "5-(1-propynyl)-2'-deoxycytidine; This base is given as N in the sequence shown as SEQ ID NO: 5 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . Match 0.5%; Score 10.8; DB 1; Length 15; Local Similarity 85.7%; Pred. No. 9e+02; es 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ON-4 oligonucleotide used to generate duplex structures.
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 0 A; 5 C; 0 G; 5 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
Example 2; Col 39; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1016 AAAAAGAGGGGAG 1029
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15 AAAAAGAGAGAGAG 2
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/mod_ba
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modified_base
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                                                                                                                                                                                                                                                                                                                                                             triple helix s
the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAD41858;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1702
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Matches
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Gaps

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cardiovascular disorders, immune reactions and bacterial infections for modulating target gene expression. They are also useful in gene therapy. The present sequence is an oligonucleotide used in the exemplification of the invention
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                                                                                                                                                                                                                                                                                                                                                               Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified base
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                                                                                                                                                                                                                                                  30-OCT-2002
                                                                                                                                                                                                                                                                                                                                        Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-APR-2002
                                                                                                                                                                                                                           AAD41881;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_RNA
                                                                                                                                                                                RESULT 1704
                                                                                                                                                                                            AAD41881,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comprise at least three 3'-5' linked nucleosides or their salts. At least one internucleoside linkage is not a phosphodiester linkage and at least for binding to a DNA duplex target sequences of the invention are useful for binding to a DNA duplex target sequence via either CT or GT triplex helix binding motif and in antisense therapies. They are also used for treating diseases caused by viruses and for diagnostic applications to detect viral infections, bacterial infections and diseases such as cancers. The oligomers are also used as primers, in the treatment of pathological conditions associated with inflammatory conditions,
                                                                                                                                                                                                                                                                                                                 mod_base= OTHER
note= "5-methyl-2'-deoxycytidine; This base is given as
vin the sequence shown as SEQ ID NO: 44 in the sequence
listing"
                                      /mod_base= OTHDR
/note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 44 in the sequence
listing"
                                                                                                                                                                              /mod_base= OTHER
/note= "5-methy1-2'-deoxycytidine, This base is given as
N in the sequence shown as SEQ ID NO: 44 in the sequence
listing"
                                                                                                                       note= "5-methyl-2'-deoxycytidine; This base is given as N in the sequence shown as SEQ ID NO: 44 in the sequence listing"
                                                                                                                                                                                                                                                           /note= "5-methyl-2'-deoxycytidine, This base is given as N in the sequence shown as SEQ ID NO: 44 in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gutierrez AJ;
                                                                                                                                                                                                                                                                                                                                                                         /*tag= f
/label= RNA
/note= "5-(1-propynyl)-2'-deoxyuridine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jones RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wagner R, Mattencci M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 18; Col 54; 106pp; English.
           Location/Qualifiers
                                                                                                                                                                                                                                                   base= OTHER
                                                                                                               base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91US-00799824.
92US-00935444.
92US-00965941.
92US-00976103.
94US-00338352.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96US-00599738
                                                                                                    *tag= b
                                                                                                                                                                                                                                                                                  isting"
                                                                                                                                                                                                                                        *tag=
                                  *tag=
                                                                                                                                                                       *tag=
                                                                                                                                                                                                                                                                                                          *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PHARM INC
                                                                                                                                                                                                                                                                                                                   /mod
                                                                                                                /mod
                                                                                                                                                                                                                                                   /mod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-535437/57.
             Key
modified_base
                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                            modified base
                                                                                        modified base
                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SISI (-SISI)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-AUG-1992;
23-OCT-1992;
25-NOV-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Froehler B,
                                                                                                                                                                                                                                                                                                                                                                                                                      US6380368-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                          30-APR-2002
                                                                                                                                                                                                                                                                                                                                                               misc RNA
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sequence
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sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 28 in the sequence
listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 28 in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "5-(1-propynyl)-2'-deoxyuridine; This base is given as N in the sequence shown as SEQ ID NO: 28 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine, This base is given as
N in the sequence shown as SEQ ID NO: 28 in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense therapy, infection, cardiovascular disorder, immune reaction, gene therapy, virucide, cytostatic, antibacterial, antiinflammatory, cancer, cardiant, RNA-DNA hybrid, ss.
                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ON-23 oligonucleotide used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "5-methyl-2'-deoxycytidine, This base is
N in the sequence shown as SEQ ID NO: 28 in the
listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine; This base is
/note= "5-methyl-2'-deoxycytidine; This base is
N in the sequence shown as SEQ ID NO: 28 in the
listing"
                                                                                                          ö
                                             Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
Sequence 15 BP; 0 A; 5 C; 0 G; 5 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                1016 AAAAAGAGGGGAG 1029
                                                                                                                                                                                                                                                                                                                                                     AAD41881 standard, DNA, 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   *tag= b
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in the
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/mod_base= OTHER
/note= "5-(1-propynyl)-2'-deoxycytidine; This base is
given as N in the sequence shown as SEQ ID NO: 13 in the
sequence listing"
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in the
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                                                                                      is
in
                                                                                                                                                                                                                                     is
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                                                              /mod_base= OTHER
/note= "5-(1-propynyl)-2'-deoxyuridine; This base
given as N in the sequence shown as SEQ ID NO: 13
sequence listing"
                                                                                                                                                                                                                                    This base
ID NO: 13
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ID NO: 13
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ID NO: 13
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                                                                                                                                                                                                         /*tag= e //mod_base= OTHER //mod_base= OTHER //mote= "5-(1-propynyl) -2'-deoxyuridine; given as N in the sequence shown as SEQ sequence listing"
              /mod_base= OTHER
/note= "5-(1-propynyl)-2'-deoxycytidine"
                                                                                                                                                                            note = "5-(1-propynyl)-2'-deoxycytidine"
                                                                                                                                                                                                                                                                                                                                                                        /mod_base= OTHER
hote= "5-(1-propynyl)-2'-deoxyuridine,
given as N in the sequence shown as SEQ
sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "5-(1-propynyl)-2'-deoxyuridine;
given as N in the sequence shown as SEQ
sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /noce= "5-(1-propynyl)-2'-deoxyuridine;
given as N in the sequence shown as SEQ
sequence listing"
                                                                                                                                                                                                                                                                                                               /mod_base= OTHER
/note= "5-(1-propynyl)-2'-deoxycytidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod_base= OTHER
/note= "5-(1-propynyl)-2'-deoxycytidine"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= i
/mod_base= OTHER
"[-/1-pro]
                                                                                                                                                                                                                                                                                                                                                          /*tag= g
/mod_base= OTHER
           base= OTHER
                                                                                                                                                              base= OTHER
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92US-00935444.
92US-00965941.
92US-00976103.
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                                                         *tag=
                                                                                                                                               *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISIS-) ISIS PHARM INC
                                                                                                                                                              /mod/
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                                         base
                                                                                                                                                                                          modified_base
                                                                                                                                 modified_base
                                                                                                                                                                                                                                                                                 modified base
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25-AUG-1992;
23-OCT-1992;
25-NOV-1992;
14-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Froehler B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US6380368-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-APR-2002
                                         modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pudlo J;
The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comprise at least three 3.-5. linked mucleosides or their saits. At least one internucleoside linkage is not a phosphoditester linkage and at least one internucleoside linkage is not a phosphoditester linkage and at least one nucleoside comprises a base. Sequences of the invention are useful for hinding to a DNA duplex target sequence via either CT or GT triplex helix binding motif and in antisense therapies. They are also used for treating diseases caused by viruses and for disgnostic applications to detect viral infections, bacterial infections and diseases such as cancers. The oligomers are also used as primers, in the treatment of pathological conditions associated with inflammatory conditions, cardiovascular disorders, immune reactions and bacterial infections and therapy. The present sequence is an oligomucleotide useful in gene therapy. The present sequence is an oligomucleotide useful in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "5-(1-propynyl)-2'-deoxyuridine; This base is given as N in the sequence shown as SEQ ID NO: 13 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense therapy, infection, cardiovascular disorder, immune reaction, gene therapy, virucide, cytostatic, antibacterial, antiinflammatory;
                                                                                                                                                                                                                               New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                            Gutierrez AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
rative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 0 A; 5 C; 0 G; 6 T; 4 U; 0 Other;
                                                                                                                                                            Jones RJ,
                                                                                                                                                          Mattencci M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                             Example 15; Col 51; 106pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= a
/mod_base= OTHER
                                   91US-00799824.
92US-00935444.
92US-00965941.
92US-00976103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAD41866 standard; RNA; 15 BP
         96US-00599738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1016 AAAAAGAGGGGAG 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-OCT-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 AAAAAGAGAGAGA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 85.7
les 12; Conservative
                                                                                                                                                         Wagner R,
                                                                                                                            (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene therapy, virucid
cancer, cardiant, ss.
                                                                                                                                                                                                    WPI; 2002-535437/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified base
                                                                               25-NOV-1992;
14-NOV-1994;
         12-FEB-1996;
                                                    25-AUG-1992;
23-OCT-1992;
                                                                                                                                                       Froehler B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unidentified
                                      26-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAD41866;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                         Pudlo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "5-(1-propynyl)-2'-deoxycytidine, This base is given as N in the sequence shown as SEQ ID NO: 47 in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "5-(1-propynyl)-2'-deoxycytidine; This base is given as N in the sequence shown as SEQ ID NO: 47 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "5-(1-propynyl)-2'-deoxycytidine, This base is given as N in the sequence shown as SEQ ID NO: 47 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "5-(1-propynyl)-2/-deoxycytidine; This base is given as N in the sequence shown as SEQ ID NO: 47 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense therapy; infection; cardiovascular disorder; immune reaction; gene therapy; virucide; cytostatic; antibacterial; antiinflammatory; cancer; cardiant; ds.
                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ON-39 oligonucleotide used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                  0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                         Sequence 15 BP; 0 A; 5 C; 0 G; 0 T; 10 U; 0 Other;
comprise at least three 3'-5' linked nucleosides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                         Example 6; Col 41; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                               AAD41900 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                     1016 AAAAAGAGGGGAG 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-OCT-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                            12; Conservative
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                                                                                                                                                                                                                                                                                                               Local Similarity
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                                                                                                                                                                                                                                                the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAD41900;
                                                                                                                                                                                                                                                                                                     Query Match
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                                                             /mod_base= OTHER
/note= "5-(1-propynyl)-2'-deoxycytidine; This base is
given as N in the sequence shown as SEQ ID NO: 47 in the
sequence listing"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gutierrez AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              / Match 0.5%; Score 10.8; DB 1; Length 15; Local Similarity 85.7%; Pred. No. 9e+02; loss 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jones RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Froehler B, Wagner R, Mattencci M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 18; Col 54; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          therapy. The present sequence is
exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                           92US-00935444.
92US-00965941.
92US-00976103.
94US-00338352.
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                                                                                                                                                                                                                                                                                                                                                                 96US-00599738
                                                                                                                                                                                                                                                                                                                                                                                                                                  91US-00799824
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                    /*tag=
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modified_base
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23-OCT-1992;
25-NOV-1992;
14-NOV-1994;
                                                                                                                                                                                                                                   US6380368-B1
                                                                                                                                                                                                                                                                                                                                                                 12-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                      26-NOV-1991;
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                                                                                                                                                                                                                                                                                                    30-APR-2002.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pudlo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1707
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Froehler B,
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                                                                                                                                                           Pudlo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1708
AAD41862/c
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/bote= "Optionally 5-(1-propynyl)-2' -deoxyuridine or 5-(3
methyl-1-butynyl) uracil; This base is given as N in the
sequence shown as SEQ ID NO: 3 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 3 in the sequence
listing"
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                                                                                                  'note= "5-methyl-2'-deoxycytidine; This base is given as
' in the sequence shown as SEQ ID NO: 3 in the sequence
listing"
                                                                                                                                                                                                                                                                                                              /note= "5-(1-propyny1)-2'-deoxyuridine; This base is given as N in the sequence shown as SEQ ID NO: 3 in the sequence listing"
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/mod_base= OTHER
/note= "5-(1-propynyl)-2'-deoxyuridine, This base is
given as N in the sequence shown as SEQ ID NO: 3 in the
sequence listing"
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/mod= "5-(1-propynyl)-2'-deoxyuridine; This base is
given as N in the sequence shown as SEQ ID NO: 3 in the
sequence listing"
                                                                                                                                                                                        /mod_base= OTHER
/noce= "5-methyl-2'-deoxycytidine, This base is given as
N in the sequence shown as SEQ ID NO: 3 in the sequence
listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "5-(1-propynyl)-2'-deoxyuridine; This base is given as N in the sequence shown as SEQ ID NO: 3 in the sequence listing"
                                   Location/Qualifiers
                                                                                     base= OTHER
                                                                                                                                                                                                                                                                                                 base= OTHER
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/mod_base= OTHER
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/mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                       *tag= c
label= RNA
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/mod base=
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modified_base
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Unidentified
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The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comprise at least three 3-5' linked nucleosides or their salts. At least one internucleoside linkage is not a phosphodiester linkage and at least one internucleoside linkage is not a phosphodiester linkage and at least one nucleoside comprises a base. Sequences of the invention are useful for binding motif and in antisense therapies. They are also used for treating diseases caused by viruses and for diagnostic applications to treating diseases such as cancers. The oligomers are also used as primers, in the treatment of pathological conditions associated with inflammatory conditions, and cancers. The oligomers immune reactions and bacterial infections and cancers are disorders, immune reactions and bacterial infections and cancers. The present sequence is an oligomicleotide used to generate therapy. The present sequence is used in the exemplification of the internal of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
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/note= "5-methyl-2'-deoxycytidine; This base is given as
N in the sequence shown as SEQ ID NO: 9 in the sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New oligomers useful for binding to DNA duplex target sequence and fo
treating e.g. diseases caused by viruses and inflammatory conditions
comprise at least three 3'-5' linked nucleosides.
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                                                                                                                                                                                                                                                                                                                                                                                       Gutierrez AJ;
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                                                                                                                                                                                                                                                                                                                                                                                  Wagner R, Mattencci M, Jones RJ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Col 39; 106pp; English.
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/mod_base= OTHER
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                                              92US-00935444.
92US-00965941.
92US-00976103.
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Best Local Similarity 85.79
Marches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= a
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                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-535437/57.
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modified_base
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                                         25-AUG-1992;
23-OCT-1992;
25-NOV-1992;
14-NOV-1994;
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schultz451-1.rng

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Gaps

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Indels

2;

85.7%; Pred. No. 9e+

Conservative

12;

Matches

Best Local Similarity

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The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comprises at least three 3.-5. linked nucleosides or their sailts. At least one internucleoside linkage is not a phosphodiester linkage and at least one internucleoside linkage. Sequences of the invention are useful for binding to a DNA duplex target sequence via either or or off triplex helix binding motif and in antisense therapies. They are also used for treating diseases caused by viruses and for disgnostic applications to detect viral infections, bacterial infections and diseases such as cancers. The oligomers are also used as primers, in the treatment of pathological conditions associated with inflammatory conditions, cardiovascular disorders, immune reactions and bacterial infections and cardiovascular disorders, immune reactions and bacterial infections and the modulating target gene expression. They are also useful in gene therapy. The present sequence is an oligomicleotide used to generate triple helix structures. This sequence is used in the exemplification of
                                                                                                                                                                                                                                                                                                                                      listing"
11. 15
A-tag= f
/label= RNA
/note= "5-(3-methyl-1-butynyl) uracil; This base is given as N in the sequence shown as SEQ ID NO: 9 in the sequence listing"
note= "5-methyl-2'-deoxycytidine, This base is given as
in the sequence shown as SEQ ID NO: 9 in the sequence
isting"
                                                                                                   note= "5-methyl-2'-deoxycytidine; This base is given as in the sequence shown as SEQ ID NO: 9 in the sequence isting"
                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine; This base is given as
N.in the sequence shown as SEQ ID NO: 9 in the sequence
                                                                                                                                                                                     /mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine; This base is given at
N in the sequence shown as SEQ ID NO: 9 in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gutierrez AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jones RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wagner R, Mattencci M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 5; Col 40; 106pp; English.
                                                                     *tag= c
nod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      91US-00799824.
92US-00935444.
92US-00965941.
92US-00976103.
94US-00338352.
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                                                                                                                                                                      *tag= d
                                                                                                                                                                                                                                          isting"
                                                                                                                                                                                                                                                                          tag=
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                                                   modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Froehler B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-AUG-1992
23-OCT-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-APR-2002
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                                                                                                                                                                                                                                                                                                                                                        misc RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pudlo J;
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DB 1; Length 15;

0 A; 5 C; 0 G; 5 T; 5 U; 0 Other;

Sequence 15 BP;

Query Match

0.5%; Score 10.8;

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given as
sequence
                                                                                                                                                                                                                                                                                                                        /*tag= b
/mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine, This base is given as
N in the sequence shown as SEQ ID NO: 29 in the sequence
listing"
                                                                                                                                                                                                                                                                             /note= "5-methyl-2'-deoxycytidine, This base is given as N in the sequence shown as SEQ ID NO: 29 in the sequence listing"
                                                                                                                                                                                                                                                                                                                                                                                                       mod_base= OTHER
note= "s-methyl-2'-deoxycytidine, This base is given as
in the sequence shown as SEQ ID NO: 29 in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= e/mod_base OTHER
/mod_base OTHER
/note= "5-metbyl-2'-deoxycytidine; This base is given as
N in the sequence, shown as SEQ ID NO: 29 in the sequence
                                                                                                                                                                 Antisense therapy, infection, cardiovascular disorder, immune reaction, gene therapy, virucide, cytostatic, antibacterial, antiinflammatory, cancer, cardiant, ss.
                                                                                                                                           ON-24 oligonucleotide used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine; This base is
N in the sequence shown as SEQ ID NO: 29 in the
listing"
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3. .14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mod_base=.OTHER
/note= "3'-thioformacetal linkage (3',5')"
                                                                                                                                                                                                                                  Location/Qualifiers
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/mod_base= OTHER
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'mod_base= OTHER
                                                              AAD41882/c
ID AAD41882 standard; DNA; 15 BP.
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92US-00935444.
92US-00965941.
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1016 AAAAAGAGGGGAG 1029
                                                                                                                      (first entry)
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1. .12
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                     15 AAAAAGAGAGAGAG
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modified_base
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25-AUG-1992;
23-OCT-1992;
                                                                                                                                                                                                              Unidentified
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1016 AAAAAGAGGGGAG 1029
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14-NOV-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-FEB-1996;
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Pudlo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-AUG-1992;
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        à
                                                                                                                                                                                                                                                                                                                             The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comprise at least three 3-5' linked nucleosides or their salts. At least one internucleoside linkage is not a phosphodicaster linkage and at least one internucleoside comprises a base. Sequences of the invention are useful for inhinging to a DNA duplex target sequence via either CT or GT triplex helix binding not if and in antisense therapies. They are also used for treating diseases caused by viruses and for diagnostic applications to detect viral infections, bacterial infections and diseases such as cancers. The oligomers are also used as primers, in the treatment of pathological conditions associated with inflammatory conditions, cardiovascular disorders, immune reactions and bacterial infections and therapy. The present sequence is an oligomucleotide used in the exemplification of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense therapy, infection, cardiovascular disorder, immune reaction, gene therapy, virucide, cytostatic; antibacterial; antilnflammatory; cancer, cardiant, ss.
                                                                                                                                                                                                          New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
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/note= "Optionally 5-methyl-2'-deoxycytidine or 5-(1-
propynyl).2'-deoxycytidine, This base is given as N in
the sequence shown as SEQ ID NO: 1 in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "Optionally 5-methyl-2'-deoxycytidine or 5-(1-propynyl)-2'-deoxycytidine; This base is given as N in the sequence shown as SEQ ID NO: 1 in the sequence
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                                                                                                          Gutierrez AJ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9e+02;
2, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                                                                                                        Jones RJ,
                                                                                                        Mattencci M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                            Example 15; Col 51; 106pp; English.
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/mod_base= OTHER
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92US-00976103
94US-00338352
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                                                                                                        Wagner R,
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                                                              (ISIS-) ISIS PHARM INC.
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25-NOV-1992;
14-NOV-1994;
                                                                                                      Froehler B,
Pudlo J;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            or 5-(1-
                                                                                                                                                                                                                                                                                                                               N in
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                                                                                                                                                                                                                                             /mod_base= OTHER /note= "Optionally 5-methyl-2'-deoxycytidine or 5-(1-propynyl)-2'-deoxycytidine; This base is given as N in the sequence shown as SEQ ID NO: 1 in the sequence listing"
                     /mod_base= OTHER
/nod_base= "Optionally 5-methyl-2'-deoxycytidine or 5-(1-
propynyl)-2'-deoxycytidine; This base is given as N in
the sequence shown as SEQ ID NO: 1 in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= e
/mod_base= OTHER
/node= "Optionally 5-methyl-2'-deoxycytidine or 5-(1
propynyl)-2'-deoxycytidine; This base is given as N:
the sequence shown as SEQ ID NO: 1 in the sequence
listing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to novel oligomers which have enhanced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wagner R, Mattencci M, Jones RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 2; Col 39; 106pp; English.
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92US-00935444.
92US-00965941.
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*tag= c
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Best Local Similarity 85.7°
Matches 12, Conservative
                                                                                                                          the seque
listing"
                                                                                                                                                                                                                              *tag≃
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15 AAAAAGAGAGAGAG

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Antisense therapy, infection, cardiovascular disorder, immune reaction, gene therapy, virucide, cytostatic, antibacterial, antiinflammatory, cancer, cardiant, ss.
                                                                                                                                                                  1. .15
/*tag= a
/note= "All the bases are given as N in the sequence
shown as SEQ ID NO: 7 in the sequence listing"
                                                                            ON-5 oligonucleotide used to generate triple helix structures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine"
11. .15
/tag= 1
/mod_base= OTHER
/note= "5-(1-propynyl)-2'-deoxyuridine"
                                                                                                                                                                                                                                                                                               /*tag= d
/mod_base= OTHER
/note= "5-(1-propynyl)-2'-deoxyuridine"
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/mod_base= OTHER
/note= "5-(1-propynyl)-2'-deoxyuridine"
                                                                                                                                                                                                                                                                                                                                                                                                note= "5-(1-propymyl)-2'-deoxyuridine"
                                                                                                                                                                                                                                 note= "5-(1-propynyl)-2'-deoxyuridine'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'note= "5-(1-propynyl)-2'-deoxyuridine"
                                                                                                                                                                                                                                                        *tag= c
mod_base= OTHER
'note= "5-methyl-2'-deoxycytidine"
                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag= g
/mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= i
/mod_base= OTHER
/note= "5-methyl-2'-deoxycytidine"
                                                                                                                                                                                                                                                                                                                                                         note = "5-methyl-2'-deoxycytidine"
                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                  /*tag= b
/mod_base=_OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                          '*tag= h
'mod base= OTHER
                                                                                                                                                                                                                                                                                                                                      /*tag= e
/mod_base= OTHER
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mod_base= OTHER
                   AAD41860 standard; RNA; 15 BP.
                                                         (first entry)
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                                                         30-OCT-2002
                                                                                                                                                                    misc_feature
                                                                                                                                      Unidentified
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                                      AAD41860;
RESULT 1711
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30-APR-2002

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The present invention relates to novel oligomers which have enhanced ability with respect to forming duplexes or triplexes. The oligomers comparise at least three 3'-5' linked mucleosides or their salts. At least one internucleoside linkage is not a phosphodiester linkage and at least one internucleoside linkage is not a phosphodiester linkage and at least one nucleoside comprises a base. Sequences of the invention are useful for hinding to a DNA duplex target sequence via either CT or GT triplex treating diseases caused by viruses and for diagnostic applications to detect viral infections, bacterial infections and diseases such as cancers. The oligomers are also used as primers, in the treatment of pathological conditions associated with inflammatory conditions, cardiovascular disorders, immune reactions and bacterial infections and the modulating target gene expression. They are also useful in gene therapy. The present sequence is an oligomucleotide used to generate triple helix structures. This sequence is used in the exemplification of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
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                                                                                                                                                                                                                                                                                                                                      Wagner R, Mattencci M, Jones RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 4; Col 39; 106pp; English.
                                                            91US-00799824.
92US-00935444.
92US-00965941.
92US-00976103.
94US-00338352.
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92US-00935444.
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96US-00599738
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                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC.
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                                                                                                                                                                                                                                                                                                                                  Froehler B,
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25-AUG-1992;
   12-FEB-1996;
                                                                                                                                                               25-NOV-1992;
14-NOV-1994;
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                                                               26-NOV-1991;
                                                                                               25-AUG-1992
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                                                                                                                                                                                                                                                                                                                                                                  Pudlo J;
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Pudlo J;

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The present invention describes a method for detecting mutations associated with anti-HIV drug resistance in a patient by detecting at least one of the mutations K103N/R, V106A/IL, Y181CI, M184V/I, Y188L, G190A/S/R, T215Y/F/D/S/A and/or O151M/L in the reverse transcriptase (RT) of HIV strains in a biological sample using a specific set of probes optimised to function together in a reverse-hybridisation assay. The method and the nucleic acid sequences used in the method are useful for determining viral mutations and/or polymorphisms in the HIV RT gene associated with resistance. The probes are useful for the genetic detection, preferably in vitro detection of the mutations K103N/R, V106A/IL, Y18IC/I, Q15IM/L, M184V/I, Y188L, G190A/S/R and/or mutation is associated with anti-HIV drug resistance. The method provides a rapid, reliable and precise assay or determination and monitoring of a rapid, reliable and precise assay or determination and monitoring of antivisal drug resistance or mutations associated with drug resistance of viruses containing RT genes. ABZ33759 to ABZ34642 represent HIV RT security of the present and provides and probes which are used in the exemplification of the present
                                                                                                Detecting mutations associated with anti-HIV drug resistance comprises detecting at least one of the mutations in the HIV reverse transcriptase gene by using probes optimized to function together in a reverse-hybridization assay.
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detection; mutation; anti-HIV drug resistance; polymorphism; resistance;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HIV-1 reverse transcriptase mutation detection probe SEQ ID NO:463
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 3 A; 5 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                          Claim 2; Page 29; 117pp; English.
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20-APR-2001; 2001EP-00870085.
24-APR-2001; 2001US-0286102P.
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       Stuyver L;
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                                                      WPI; 2002-590680/63.
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       De Smet K,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                New oligomers useful for binding to DNA duplex target sequence and for treating e.g. diseases caused by viruses and inflammatory conditions comprise at least three 3'-5' linked nucleosides.
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                                                                                                                                              Gutierrez AJ;
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85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 10 A; 0 C; 5 G; 0 T; 0 U; 0 Other;
                                                                                                                                                 Jones RJ,
                                                                                                                                                 Wagner R, Mattencci M,
                                                                                                                                                                                                                                                                                                                                                                   Example 6; Col 41; 106pp; English.
92US-00965941.
92US-00976103.
94US-00338352.
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20-APR-2001; 2001EP-00870085.
24-APR-2001; 2001US-0286102P.
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Best Local Similarity 85.7
Matches 12; Conservative
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                                                                                             (ISIS-) ISIS PHARM INC.
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23-OCT-1992;
25-NOV-1992;
14-NOV-1994;
                                                                                                                                            Froehler B,
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probe; ss

ABZ34638;

RESULT 1713 ABZ34638

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The present invention describes a method for detecting mutations associated with anti-HIV drug resistance in a patient by detecting at least one of the mutations K103N/R, V106A/IL, V181C1, M184V/I, Y18EL, C190A/S/R, T215Y/F/D/S/A and/or Oli1M/L in the reverse transcriptase (RT) of HIV strains in a biological sample using a specific set of probes of HIV strains in a biological sample using a specific set of probes of HIV strains in a biological sample using a specific set of probes of the mutation together in a reverse-hybridisation assay. The method and the nucleic acid sequences used in the method are useful for determining viral mutations and/or polymorphisms in the HIV RT general sociated with resistance. The probes are useful for the genetic detection, preferably in virto detection of the mutations K103N/R, V106A/IL, Y18IC/I, Ol51M/L, M184V/I, Y188L, G190A/S/R and/or call as associated with anti-HIV drug resistance. The method provides a rapid, reliable and precise assay or determination and monitoring of antiviral drug resistance of mutation associated with anti-HIV drug resistence of viruses containing RT genes. AB234642 represent HIV RT sequences and probes which are used in the exemplification of the present
Detecting mutations associated with anti-HIV drug resistance comprises detecting at least one of the mutations in the HIV reverse transcriptase gene by using probes optimized to function together in a reverse-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New human nucleic acid containing specific SAGE tags, useful as diagnostic markers for cancer, also derived probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 3 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                 Claim 2; Page 29; 117pp; English.
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                                                                                        gene by using probes hybridization assay.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-153821/20.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US6333152-B1.
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The invention relates to an isolated, purified human nucleic acid (I) that has the same sequence as a mRNA found in humans and is a SAGE (serial analysis of gene expression) tag comprising a single stranded probe containing at least 10 consecutive nucleotides. SAGE tags, are diagnostic and prognostic markers of cancer, especially of the colon and panaceas. ABK21900-ABK22770 represent human colon and pancreatic cancer SAGE tags of the invention
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                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               analysis of gene expression; diagnostic; prognostic; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New human nucleic acid containing specific SAGE tags, useful as diagnostic markers for cancer, also derived probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                    0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels
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                                                                                                                                      Sequence 15 BP; 3 A; 9 C; 1 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zhou W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Vogelstein B, Kinzler KW, Zhang L,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human colon cancer SAGE tag #79.
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                                                                                                                                                                                                                                          1254 CATCCCCAACCCC 1267
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Best Local Similarity 85.7%
****ches 12, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cancer marker; ss.
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WALLES - CANADAM CONTRACTOR

23-APR-2002 (first entry)

ABK32713

RESULT 1717

ABK3271

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The invention relates to an isolated, purified human nucleic acid (I) that has the same sequence as a mENA found in humans and is a SAGE (serial analysis of gene expression) tag comprising a single stranded probe containing at least 10 consecutive nucleotides. SAGE tags, are diagnostic and prognostic markers of cancer, especially of the colon and pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer SAGE tags of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag;
serial analysis of gene expression; diagnostic; prognostic; probe;
cancer marker; ss.
                                                                                                                                                                                              New human nucleic acid containing specific SAGE tags, useful as diagnostic markers for cancer, also derived probes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 7 A; 3 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 10.8; DB 1;
Pred. No. 9e+02;
0; Mismatches 2;
                                                                                                                              Zhou W;
                                                                                                                            Zhang L,
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                   98US-00081646.
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                                                                                       (UYJO ) UNIV JOHNS HOPKINS
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                                                                                                                            Vogelstein B, Kinzler
                                                                                                                                                             WPI; 2002-153821/20.
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                   20-MAY-1998;
                                                      20-MAY-1998;
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to an isolated, purified human nucleic acid (I) that has the same sequence as a mRNA found in humans and is a SAGE (Serial analysis of gene expression) tag comprising a single stranded probe containing at least 10 consecutive nucleotides. SAGE tags, are diagnostic and prognostic markers of cancer, especially of the colon and pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                         Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag; serial analysis of gene expression; diagnostic; prognostic; probe; cancer marker; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, colon cancer, colorectal cancer, pancreatic cancer, SAGE tag, serial analysis of gene expression, diagnostic, prognostic, probe, cancer marker, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New human nucleic acid containing specific SAGE tags, useful as diagnostic markers for cancer, also derived probes.
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                                                                                                                                        Human colorectal and pancreatic cancer SAGE tag #80.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zhou W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5%; Score 10.8; D
85.7%; Pred. No. 9e+0
iive 0; Mismatches
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                           ABK32713 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vogelstein B, Kinzler KW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pancreas. ABK31900-ABK32770
SAGE tags of the invention
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ATGTGGCCCCACCC 15

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8

RESULT 1718

Conservative

Local Similarity

Query Match

12;

Matches

(first entry)

23-APR-2002

2 X 3 X 8 X 2 X 2 X 3 X 4 X 1

ABK32751;

Homo sapiens US6333152-B1

25-DEC-2001

(UYJO) UNIV JOHNS HOPKINS

20-MAY-1998; 20-MAY-1998;

US6333152-B1 Homo sapiens

25-DEC-2001

WPI; 2002-153821/20.

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The invention relates to an isolated, purified human nucleic acid (1) that has the same sequence as a mRNA found in humans and is a SAGB serial analysis of gene expression) tag comprising a single stranded probe containing at least 10 consecutive nucleotides. SAGE tags, are diagnostic and prognostic markers of cancer, especially of the colon and pancreas. ABKX1900-ABXX2770 represent human colon and pancreatic cancer SAGE tags of the invention
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                                                                                                                                                                                                                                 Human, colon cancer, colorectal cancer, pancreatic cancer, SAGE tag; serial analysis of gene expression, diagnostic; prognostic; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New human nucleic acid containing specific SAGS tags, useful as diagnostic markers for cancer, also derived probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhang L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Probe z for assaying nucleic acids.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure, Col 59, 161pp; English.
                                                                                                                                                                            Human colon cancer SAGE tag #546.
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                                                                                                                                                                                                                                                                                                        cancer marker; ss.
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                                                    ABK32445;
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probe containing at least 10 consecutive nucleotides. SAGE tags, are diagnostic and prognostic markers of cancer, especially of the colon and pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer SAGE tags of the invention
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                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, colon cancer, colorectal cancer, pancreatic cancer, SAGE tag, serial analysis of gene expression, diagnostic, prognostic, probe,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New human nucleic acid containing specific SAGE tags, useful as
diagnostic markers for cancer, also derived probes.
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                                                                                                                                                                                                                                        Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 7 A; 3 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                            Seguence 15 BP; 2 A; 8 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Vogelstein B, Kinzler KW, Zhang L, Zhou W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Col 29; 161pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human colon cancer SAGE tag #223.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABK32122 standard; DNA; 15 BP.
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                                                                                                                                                                                                                                                                                                                                                                           1193 AGGTGGCACCACCC 1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYJO ) UNIV JOHNS HOPKINS.
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                                                                                                                                                                                                                                                                                                                                                                                                                               2 ATGTGGCCCCACCC 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer marker; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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27-JUN-2001; 2001WO-IB001147. 27-JUN-2000; 2000JP-00193133.

ABK32445 standard; DNA; 15 BP.

RESULT 1721

à 9 ABK32445 ID ABK3

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The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV ribozymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or replication of hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was obtained in electronic format directly from the USPTO web site at
                                                                                  New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Enzymatic nucleic acid, RNA cleavage, Hepatitis C virus infection, HCV ribozyme; HCV expression, HCV replication, cirrhosis, virucide, liver failure, hepatoccellular carcinoma; HCV infection, drug therapy, type I interferon; interferon alpha; interferon beta; cytostatic, interferon gamma; consensus interferon, hepatotropic, antiinflammatory; substrate; hammerhead ribozyme; HH ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hepatitis C virus substrate #300 for HCV hammerhead ribozyme #300.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels
Roberts B, Pavco PA, Macejack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15 BP; 0 A; 8 C; 4 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pavco PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Roberts B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       segdata.uspto.gov/psipsDIDEntry.html
                                                                                                                                                                              Claim 1; Page 32; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-00274553.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABX00518 standard; RNA; 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 85.75
Marches 12; Conservative
  Blatt L, Mcswiggen JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BLATT L.
MCSWIGGEN J A.
ROBERTS B.
PAVCO P A.
MACEJACK D.
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                                           WPI; 2002-617759/66.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ROBE/) H
(PAVC/) H
(MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BLAT/) I
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                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to nucleic acid probes, which are useful for assaying nucleic acids by hybridising with a target nucleic acid, in which a single-stranded oligonucleotide is labelled with a fluorescent substance and a quencher in a manner that the fluorescence intensity of the hybridisation reaction system is increased after completion of the hybridisation but no stem loop structure is formed. The probes are useful for assaying nucleic acids and their polymorphism and mutation, and micrail for e.g. analytical applications, disease diagnosis and microhian identification. The present sequence was used to illustrate the invention
                                                                                                                                                                                                                                             Fluorescently-labeled nucleic acid probes for assaying nucleic acids and their polymorphism and mutation, particularly useful in science and medicine for e.g. andlytical applications, disease diagnosis and microbial identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Enzymatic nucleic acid, RNA cleavage, Hepatitis C virus infection, HCV ribosyme; HCV expression, HCV replication, cirrhosis, virucide; liver failure, hepatocellular carcinoma, HCV infection, drug therapy, type I interferon; interferon alpha; interferon beta; cytostatic; interferon gamma; consensus interferon; hepatotropic; autiinflammatory; substrate; hammerhead ribozyme; HH ribozyme; ss.
                                                                                                                                     Yamada K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hepatitis C virus substrate #385 for HCV hammerhead ribozyme #385.
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                                                                                                                                  Kamagata Y, Torimura M, Kurata S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Indels
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                                                                   (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY
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                                                                                                                                                                                                                                                                                                                                                              Example 14; Page 64; 152pp; Japanese.
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03-AUG-2000; 2000JP-00236115.
26-SEP-2000; 2000JP-00292483.
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ABX00603 standard; RNA; 15
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                                                                                       (KANK-) KANKYO ENG CO LID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 85.7
les 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BLATT L.
MCSWIGGEN J A.
ROBERTS B.
PAVCO P A.
MACEJACK D.
                                                                                                                                  Kanagawa T,
                                                                                                                                                                                                    WPI; 2002-195876/25.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2002082225-A1.
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                                                                                                                                  Kurane R, I
Yokomaku T;
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ABX00603;

RESULT 1723

ABX006

Query Match

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Macejack

(BLAT/) (MCSW/) (ROBE/) (PAVC/)

viral

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The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or ribozyme is in a harmerhead (HH). The carginatic nucleic acid or ribozyme is in a harmerhead (HH) or hairpin of the substrate sequences defined in the specification. The HCV carbozymes are useful for modulating the expression and/or repplication of HCV. They can be used to treat cirrhosis, liver failure and/or hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substract for a HCV harmerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was
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                            New ribozymes targeting RNA derived from hepatitis C virus inhibit vireplication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.
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                                                                                                      English
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ROBERTS B.
PAVCO P A.
                                                                                                      Claim 1; Page 29; 80pp;
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Best Local Similarity
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(MCSW/) N
(ROBE/) F
(PAVC/) F
(MACE/) N
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The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The cargymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprises sequences complementary to one of the substrate sequences defined in the specification. The HCV control of the substrate sequences defined in the specification. The HCV control of the vibozymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or replication of hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially circation alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the print of printed specification. The complete sequence data for this patent was contained in electronic format directly from the USPTO web site at
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replication and are useful to treat hepatitis C virus infections and
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                                                                                   Claim 1, Page 40, 80pp; English
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Best Local Similarity 85.7
Matches 12; Conservative
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ROBERTS B.
PAVCO P A.
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(MCSW/) MCSWIGGEN J P
(ROBZ), ROBERTS B.
(PAVC/) PAVCO P A.
(MACE/) MACEJACK D.
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The present invention relates to enzymatic nucleic acids which conspectically cleave RNA derived from Hepatitis C virus (HCV). The reargantic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin confirmatic nucleic acid or ribozyme is in a hammerhead (HH) to hairpin arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV confirmation are sequences of the substrate sequences defined in the specification. The HCV confirmation are also useful for modification of HCV They can be used to treat cirrhosis, liver failure and/or chepatocallular carcinoma. The HCV ribozymes are also useful for treating confirmation approach the rapid therapies, particularly type I interferon, especially confirmation alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) inboxyme. Note: Some of the sequence data for this patent did not form part of the complete confirmation are consensus interferon in consensus consensus confirmation with a complete sequence data for this patent was considered in electronic formet directly from the USPTO web site at
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Claim 1; Page 48; 80pp; English.
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ROBERTS B.
PAVCO P A.
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(ROBE/) I
(PAVC/) I
(MACE/) N
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                                                                                         The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The cnzymatic nucleic acid or ribozyme is in a harmerhead (HH). The cnzymatic nucleic acid or ribozyme is in a harmerhead (HH). The characters conducted the substrate sequences defined in the specification. The HCV or thosymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV harmerhead (HH) ribozyme. Note: Some of the sequence data for this patent was obtained in electronic format directly from the USPTO web site at
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     cirrhosis, liver failure or hepatocellular carcinoma.
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(MCSW/) MCSWIGGEN J A.
(ROBE/) ROBERTS B.
(PAVC/) PAVCO P.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hepatitis C virus.
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ABX01167

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pecifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV cone of the used to treat cirrhosis, liver failure and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or replication of hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was obtained in electronic format directly from the USPTO web site at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection; HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide; liver failure; hepatocellular carcinoma; HCV infection; drug therapy; type I interferon; interferon alpha; interferon beta; cytostatic; interferon gamma; consensus interferon; hepatocropic; antiinflammatory; substrate; hammerhead ribozyme; HH ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hepatitis C virus substrate #776 for HCV hammerhead ribozyme #776.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The
enzymatic nucleic acids which
                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                  Some of the sequence data tot the complete sequence data printed specification. The complete sequence data obtained in electronic format directly from the US
                                                                                                                                                                                                                                                                                                                                 BP; 2 A; 8 C; 2 G; 0 T; 3 U; 0 Other;
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                                                                                                                                                                                                                                                                                           segdata.uspto.gov/psipsDIDEntry.html
  present invention relates to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 43; 80pp; English
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MCSWIGGEN J A.
ROBERTS B.
PAVCO P A.
MACEJACK D.
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(MCSW/)
(ROBE/)
(PAVC/)
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enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV ribozymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or replication of hepatocellular carcinoma. The HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the pobatined in electronic format directly from the USPTO web site at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; tive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human neuropeptide Y allele specific probe SEQ ID NO: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 2 A; 11 C; 1 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 2 A; 2 C; 6 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   isogene e.g., atherosclerosis or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  seqdata.uspto.gov/psipsDIDEntry.html
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-DEC-2000; 2000WO-US034758.
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nes 12; Conserv
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                   Homo sapiens.
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Matches 12;
                                                         08-AUG-2002,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention provides the human neuropeptide Y (NPY) gene and single nuclectide polymorphisms (SNPs) identified therein. The sequence can be used in the treatment of disorders associated with NPY, including atherosclerosis, obesity, psychological disorders and alcoholism. The present sequence is an allele specific probe used to isolate the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; CYP7A1; hepatotropic; antilipaemic; cholesterol disorder; cirrhosis; bile disorder; hypertriglyceridaemia;
                                                                                                                                                                                                                                                                                                                                                             New genetic variants of the human Neuropeptide Y (NPY) gene useful for treating disorders affected by abnormal expression or function of NPY isogene e.g., atherosclerosis or obesity.
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                                                                                                                                                              Human, neuropeptide Y, NPY, isogene, SNP, atherosclerosis, obesity, psychological disorder, single nucleotide polymorphism; alcoholism; antiarteriosclerotic, anorectic, probe, ss.
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                                                                                                                                                                                                                                                                                                                       Stephens JC;
                                                                                                                                             Human neuropeptide Y allele specific probe SEQ ID NO: 18.
Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human CYP7Al allele-specific oligonucleotide primer #28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 4 A; 7 C; 2 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                        Nandabalan K,
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                     Claim 11; Page 16; 80pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
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                                                                                   AAL48094 standard; DNA; 15 BP.
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                                                                                                                                                                                                                                                               21-DEC-2000; 2000WO-US034758
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                 1254 CATCCCCAACCCC 1267
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                               1 CAGCCCCATCCCC 14
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12; Conservative
                                                                                                                                                                                                                                                                                                                                            WPI; 2002-566671/60.
                                                                                                                                                                                                                                                                                                                        Denton RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NPY coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                         WO200251857-A1
                                                                                                                          27-SEP-2002
                                                                                                                                                                                                       Homo sapiens
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                                                                                                                                                                                                                                             04-JUL-2002.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                        Chew A,
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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                                                                 RESULT
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                                                                                             A K K E K B K K K K C
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The invention relates to a novel polymorphic variant of a sequence of CYP7A1 protein or its fragment. The polymorphic was the performance and antilipaemic activity. The polymorphic variants are useful in studying the expression and function of CYP7A1, in expressing CYP7A1 protein for use in screening candidate daugs to treat diseases related to CYP7A1 activity, in studying the effect of the variation on the biological activity of CYP7A1, and the binding affinity of candidate daugs targeting cYP7A1 for the treatment of disorders such as cholesterol and bile disorders. Haplotyping methods are useful in validating CYP7A1 as a candidate target for treating a specific condition or disease predicted to associated with CYP7A1 activity, or in the dealin of cinical trials of candidate drugs for treating a specific condition or disease associated with CYP7A1 activity, or in the dealin or disease associated with CYP7A1 activity, such as cirrhosis, familial trials of candidate drugs for treating a cirrhosis, familial and also useful for studying expression of the CYP7A1 isogenes in vivo, for in vivo screening and testing of drugs targeted against CYP7A1 protein, and left each metabolism. The present sequence represents an election of the left metabolism. The present sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New cytochrome P450 subfamily VIIA (cholesterol 7 alphamonooxygenase) polypeptide 1 gene variants, useful for studying the expression and activity of CYP7A1 and screening drugs for treating disorders of cholesterol and bile metabolism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; single nucleotide polymorphism; nucleic acid typing;
cytochrome P450, subfamily VIIA, polypeptide 1; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15 BP; 7 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human CYP2D6 gene sequencing primer A183FS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tissue typing; sequencing; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 16, Page 22, 84pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     detect CYP7A1 gene polymorphisms
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-JAN-2001; 2001WO-US003164.
                                                                                                                                                                                                                                                                                                                                                          31-JAN-2001; 2001WO-US003164.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chew A, Denton RR,
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Beal PA;

Dervan PB,

WPI; 2002-536030/57

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Triple-helix formation; purine-rich target sequence; double-helix DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene expression; regulatory sequence; pathogenic double-stranded DNA; pathogenic bacteria; virus; replication; virulence; cancer; oncogene suppression; cancerous cell; cytostatic; antimicrobial; ss.
                                                                                                                                                                                                                                                                        Typing nucleic acid for obtaining information about several variable sites involves simultaneously or sequentially performing two or more primer extension reactions, and determining the pattern of nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 2 A; 10 C; 1 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CALY ) CALIFORNIA INST OF TECHNOLOGY
                                                                                                                           PYROSEQUENCING AB.
UNIV LELAND STANFORD JUNIOR.
GARDNER R.
                                                                                                                                                                                                      Pourmand
                                                                                                                                                                                                                                                                                                                                                                    Example 5; Page 59; 86pp; English.
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                                                    10-SEP-2001; 2001WO-GB004042.
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                                                                                          )8-SEP-2000; 2000GB-00022069
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                                                                                                                                                                                                      lonaghi M, Ekstroem B,
                                                                                                                                                                                                                                         WPI; 2002-393849/42
                                                                                                                                                                                                                                                                                                                                   incorporation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-DEC-1993;
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                                                                                                                             (PYRO-)
                                                                                                                                                                GARD/)
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                                                                                                                                               (STRD
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The present invention relates to methods and oligonucleotides for forming a triple-helix comprising a double helical nucleic acid comprising first can discend substantially complementary strands, and an oligonucleotide bound to a purine-rich target sequence within the double helical nucleic acid, where the oligonucleotide binds in a parallel and antiparallel of orientation, respectively, to target sequences on alternate strands of the double helical nucleic acid. The method has therapeutic applications, where gene expression is controlled by selective triple-helical capplications, where gene expression is controlled by selective triple-helical formation within expression recontrolled by selective triple-helic acid. The method has the sequence of the coligonucleotides can be used to form triple-helices, and are useful to detect the presence or absence of specific sequences within genomic DNA for diagnostic and therapeutic purposes. The oligonucleotides can be consent to parthogenic double-stranded DNA including specific sequences required by pathogenic bacteria or viruses for replication or virulence, reducing their pathogenicity. Alternatively, the oligonucleotides can be used in the genome of pathogen of the pathogen which is not found in the genome of pathogen of riple-helix suppression of specific oncogenes including those of endogenous or viral origin. Such therapeutic oligonucleotides are capable of forming triple-helix suppression of specific oncogenes in cancer treatment by way of triple-helix origin. Such therapeutic oligonucleotides are capable of forming triple-helix origin. The present sequences in cancerous cells containing the activated concogenes, so preferentially killing or repressing the cancer causing cells. The present sequence sent expresents an oligonucleotide used in the
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/note= "C is covalently linked to Lys(Flu)-Lys(Flu) where
Flu= 5-(and 6)-carboxyfluoroescein, optional"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Probe; 23S rRNA; 16SrRNA; tuberculosis; MTC; MOTT; peptide nucleic acid; mycobacterium tuberculosis complex; precursor rRNA; rDNA; 5S rRNA; 8s; mycobacterium other than tuberculosis.
                                                                                                                                                                                     A triple-helix comprising a double helical nucleic acid (DHNA) and an oligomuclectide which binds in parallel and antiparallel orientation, respectively, for targetting sequences on alternate strands of DHNA to control gene expression.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            M. tuberculosis 23S rRNA probe #23.
                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Col 24; 108pp; English.
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/mod_base= OTHER
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Best Local Similarity 85.7
Matches 12; Conservative
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modified_base
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Kuhn A;

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The present invention relates to a method for the transient immortalisation of cells by introducing immortalisation proteins into them from the outside. The method is used to immortalisation proteins transiently to allow their expansion, particularly to produce transplant material for regenerating organs, for treating chronic (degenerative) diseases, e.g. in cases of cardiac infarct (with simultaneous reduction in the risk of congestive heart failure and future infarcts) or chronic bone degeneration (osteoporcsis), for regeneration of the liver, for treating Parkinson's disease (using dopaminrsgic cells) and for ex vivo production of heart and venous valves. The present sequence is a PCR primer used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                        Transient immortalization of cells, useful for preparing transplant material and for organ regeneration, by supplying immortalizing proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 3 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                     Meyer-Ficca M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 5; Page 29; 59pp; German.
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                                                                                                                                                                                                                          (HEAR-) HEART BIOSYSTEMS GMBH
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97US-00906378.
                                                                                                                                07-OCT-2002; 2002WO-EP011200.
                                                                                                                                                                              18-OCT-2001; 2001DE-01052972.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                867 CACTGAGGACTCAG 880
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                                                                                                                                                                                                                                                                        Meyer R,
                                                                                                                                                                                                                                                                                                                 WPI; 2003-430421/40
                                         WO2003035884-A2
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  Homo sapiens.
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05-AUG-1997;
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                                                                                       01-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                           externally.
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                                                                                                                                                                                                                                                                     Kueper J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABX93419;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABX93419,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a peptide nucleic acid capable of hybridising to a target sequence of Mycobacterial IDNA, precursor FRNA or FRNA (5S, 16S or 235) forming detectable hybrids. Also included are detecting a target sequence of mycobacteria in a sample comprising contacting FRNA or FDNA in the sample with peptide nucleic acid probes (hybridisation takes place between the probe and rhe FRNA or FDNA, observing or measuring any formed detectable hybrids and relating the observation or measurement to the presence of a target sequence of mycobacteria in particular or probes are used for detecting a target sequence of MTC (and distinguishing them from mycobacterianment than tuberculosis, MOTT) present in a sample, e.g. sputum, laryngeal swabs, gastric lavage, bronchial washings, biopsies, aspirates, expectorates, body fluids, urner, tissue sections as well as food samples, soil, air and water camples and their cultures. The probe is able to penetrate the cell wall of the mycobacterial in the mycobacterial in the mycobacterial of the mycobacterial cells, therefore avoiding a risk of interfering with the morphology of the course.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Transient immortalisation; immortalisation protein; transplant; PCR; primer; ss; cardiant; osteopathic; hepatotropic; antiparkinsonian; organ regeneration; degenerative disease; cardiac infarct; bone degeneration; osteoporosis; liver regeneration; barkinson's disease.
                                                                                                                                                                                                                                                                                                                                                                                                        Peptide nucleic acid probes for detecting target sequences of Mycobacteria in samples, e.g., sputum, which are capable of hybridizing to a target sequence of mycobacterial rDNA, precursor rRNA or rRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
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Pred. No. 9e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 3 A; 7 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human telomerase coding sequence PCR primer #4.
/note= "G is amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 22; Page 38; 74pp; English.
                                                                                                                                                                                                                                                                                                                   Mollerup TA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
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                                                                                                                                                                              07-APR-2000; 2000US-00544934.
                                                                                                                                  07-APR-2000; 2000US-00544934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5%;
Similarity 85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1054 CTGGCCCCAAACCC 1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABZ69603 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGTCCCTAAACCC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               forming detectable hybrids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                     (MOLL/) MOLLERUP T A.
                                                                                                                                                                                                                                                                                                                 Stender H, Lund K,
                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-174116/17
                                                                                                                                                                                                                          STENDER H.
                                           US2002137035-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12;
                                                                                       26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABZ69603;
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                                                                                               Gaps
                                                                                           .
0
watch 0.5%; Score 10.8; DB 1; Length 15; Local Similarity 85.7%; Pred. No. 9e+02; nes 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence specific duplex binding oligonucleotide #2.
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Matches

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The invention describes an oligonucleotide compound with intermucleoside linkages comprises at least one nucleoside. The compounds are used in oligonucleotide-based diagnosis to detect presence or absence of target gene sequences to which they specifically bind and separation through triplex binding. They are also useful as linkers or spacers in preparing absorption matrices, immobilised enzymes for process control or immunoassay reagents; as monomers to provide access to polymers having pendant functionalities; as cation exchange agents in the preparation of molecular sieves, textiles, fibres, films and formed articles; and as polyfunctional surfactants. The composition improves triplex affinity capture purification and enhances triplex binding. This sequence represents a novel oligonucleotide capable of binding to a polymucleotide duplex to form a triplex structure useful in diagnosis
                                                                                                                      New oligonucleotide compound with internucleoside linkages useful in oligonucleotide-based diagnosis comprises at least one nucleoside selected from 2-aminopyridine or 2-pyridone C-nucleosides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                      Matteucci MD;
                                                                                                                                                                                                                                Example 7; Col 24; 17pp; English.
                      Gutierrez AJ,
                      Froehler BC,
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0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ive 0; Mismatches 2; Indels 1016 AAAAAGAGGGGAG 1029 15 AAAAAGAGAGAGAG 2 Conservative Similarity 12; Query Match Matches Ωp δ

ABV72560 standard; DNA; 15 BP RESULT

(first entry) 12-FEB-2003 ABV72560;

Consensus sequence of methanol regulated promoters of yeast.

Yeast, alcohol oxidase 1; AOX1; AOX2; promoter; formaldehyde; methanol; protein production; peroxisome biogenesis; ss.

Synthetic

WO200281650-A2

17-0CT-2002

05-APR-2001; 2001US-0281861P

05-APR-2002; 2002WO-US012851.

(UYNE-) UNIV NEBRASKA

Inan M, Meagher MM, Benson AK;

WPI; 2003-058528/05.

Novel alcohol oxidase I regulatory nucleotide sequences useful for enhancing expression of genes of interest in a variety of host cells, especially yeast cells.

The invention relates to a 2-aminopyridine C-nucleoside or 2-pyridone C-nucleoside compound, its salt, solvates, resolved enantiomers or purified distrements of formula detailed in the specification. Also included is an oligomer compound comprising a multiplicity of nucleosides linked by internucleoside linkages where at least one nucleoside is a modified nucleoside comprising a 2-aminopyridine C-nucleoside is a modified nucleoside, its salts, solvates, resolved enantiomers or purified diastereomers. The oligomer is useful for detecting the presence, absence or amount of a particular DNA duplex in a sample suspected of containing DNA. The method involves contacting the sample with the oligomer under conditions where a triple helix is formed between the oligomer and the

Example 7; Col 23; 18pp; English.

Disclosure, Fig 6, 66pp, English.

The present sequence represents a consensus sequence of methanol regulated promoters of methylotrophic yeast. The specification describes

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1 5'
                                               The AOX1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel 2-aminopyridine C-nucleoside or 2-pyridone C-nucleoside compound useful for preparing oligonucleotides which are used for detecting specific DNA duplexes in samples.
5' regulatory sequences within the alcohol oxidase 1 (AOX1) promoter region. AOX1 catalyses the oxidation of methanol to formaldehyde. The AOX1 promoter is an inducible promoter, primarily induced by methanol starvation, and represent in response to glucose and ethanol. The AOX1 regulatory sequences can be used to produce expression cassettes and vectors, which are useful for protein production. The regulatory sequences are useful to increase expression of genes of interest in a versiety of host cells, in a research setting to further characterize promoter function and to study peroxisome biogenesis. They are also
                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNase footprint, ds, target, 2-aminopyridine C-nucleoside, 2-pyridone C-nucleoside, triple helix, cation exchange agent, molecular sieve, textile; fibre, film, formed article, polyfunctional surfactant, phase transfer agent, phase transfer catalysis; liquid/liquid ion extraction, optically active material, affinity absorption matrix; immobilised enzyme; immunosassay reagent.
                                                                                                                                                                                                 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                     Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNase footprint target sequence, Select II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gutierrez AJ, Matteucci MD;
                                                                                                                                                                                                                                                                                                                                                                      ABX16338 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96US-0023241P.
                                                                                                                                                                                                                                                              728 GCCAGGAGAACAG 741
                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                          15 GCCAGGATAGACAG 2
                                                                                                                                                                                                                                 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-196641/19.
                                                                                                                                                                                                                   Local Similarity
                                                                                                                                          useful as probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US6447998-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Froehler BC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                   24-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                     ABX16338;
                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                         RESULT 1739
                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                         ABX16338,
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Gaps ö 05-AUG-1997;

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particular DNA duplex . The 2-aminopyridine C-nucleoside or 2-pyridone C-nucleoside compound is useful for preparing oligonucleotides which are useful in oligonucleotide-based diagnosis and separation through triplex binding, as monomers to provide access to polymers having unique pendent functionalities, as comonomers with monomers, for preparation of molecular sleves, textiles, films, and formed articles), as polyfunctional surfactants, as phase transfer agents, in the preparation of molecular sleves, textiles, films, and formed articles), as polyfunctional surfactants, as phase transfer agents, in the synthesis or resolution of other optically active materials, and as linkers or spacers in preparing affinity absorption matrices, immobilised enzymes for process control, or immunoassay reagents. The present sequence is a target sequence (contained in a 370bp restriction fragment) for modified oligonucleotides containing 2-aminopyridine C-nucleoside or 2-pyridone C-nucleosides, used in a DNase footprint assay
                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNase footprint; ss; probe; 2-aminopyridine C-nucleoside; 2-pyridone C-nucleoside; triple helix; cation exchange agent; molecular sieve; textile; fibre; film; formed article; polyfunctional surfactant; phase transfer agent; phase transfer agent; phase transfer catalysis; liquid/liquid ion extraction; optically active material; affinity absorption matrix;
                                                                                                                                                                                                                                                                                                      0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                        Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= e
/mod_base= m3c
/note= "5-methylcytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= b
mod_base= m3c
/note= "5-methylcytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= c
/mod_base= m3c
/note= "5-methylcytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note = "5-methylcytosine'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'mod_base= m3c
'note= "5-methylcytosine'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNase footprint control probe sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immobilised enzyme; immunoassay reagent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               *tag= a
mod_base= m3c
                                                                                                                                                                                                                                                                                                                                                                         1016 AAAAGAGGGGAG 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              339/c
ABX16339 standard; DNA; 15
                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 85.7%
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-APR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                       15 AAAAGAGAGAGAG 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1740
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The invention relates to a 2-aminopyridine C-nucleoside or 2-pyridone C-
C mucleoside compound, its salt, solvates, resolved enantiomers or purified
CC disatereomers of formula detailed in the specification. Also included is
CC disatereomers of formula detailed in the specification. Also included is
CC nucleoside comprising a multiplicity of nucleosides linked by
internucleoside linkages where at least one nucleoside or 2-pyridone C-
CC nucleoside comprising a 2-aminopyridine C-nucleoside or 2-pyridone C-
CC nucleoside its salts, solvates, resolved enantiomers or purified
diastereomers. The oligomer is useful for detecting the presence, absence
CC or amount of a particular DNA duplex in a sample with the oligomer under
CC onditions where a triple helix is formed between the oligomer under
CC onditions where a triple helix is formed between the oligomer under
CC onditions where a triple helix is formed between the oligomer under
CC onditions where a triple helix is formed between the oligomer under
CC nucleoside compound is useful for preparing oligomerleotides which are
CC nucleoside compound is useful for preparing oligomecleotides which are
CC nucleoside compound is useful for preparing oligomerleotides which are
CC thortionalities as comonomers to provide access to polymers having unique pendent
CC functionalities as comonomers with monomers, for preparing plotymers
CC which are useful as cation exchange agents in the preparation of
CC molecular sieves, textiles, fibres, films, and formed articles), as
CC polyfunctional surfactants, as phase transfer agents, in phase transfer
CC resolution of other optically active materials, and as linkers or spacers
CC process control, or immunoassay reagents. The present sequence is a
CC process control, or immunoassay reagents. The present sequence is a
CC process control, or immunoassay reagents. The present sequence is a
CC process control, or immunoassay reagents. The present sequence is a
CC process control, even which demonstrates to use of the oligomer of the oligo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                               Novel 2-aminopyridine C-nucleoside or 2-pyridone C-nucleoside compound useful for preparing oligonucleotides which are used for detecting specific DNA duplexes in samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;
                                                                                                                                                     Gutierrez AJ, Matteucci MD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNase footprint probe sequence #4.
                                                                                                                                                                                                                                                                                                                                                  Example 7; Col 24; 18pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABX16343 standard; DNA; 15 BP.
97US-00906378
                                               96US-0023241P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
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                                                                                                  (ISIS-) ISIS PHARM INC
                                                                                                                                                                                               WPI; 2003-196641/19.
                                                                                                                                               Froehler BC,
                                                  9-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-APR-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nvention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABX16343;
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ABX16343/c
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The invention relates to a 2-aminopyridine C-nucleoside or 2-pyridone C-nucleoside compound, its salt, solvates, resolved enantiomers or purified diastersomers of formula detailed in the specification. Also included is an oligomer compound comprising a multiplicity of nucleosides linked by incleoside linkages where at least one nucleoside is a modified nucleoside, its salts, solvates, resolved enantiomers or purified diastersomers. The oligomer is useful for detecting the presence, absence or amount of a particular DNA duplex in a sample suspected of containing DNA. The method involves contacting the sample with the oligomer under containing makes a triple helix is formed between the oligomer under particular DNA duplex. The 2-aminopyridine C-nucleoside or 2-pyridone contacting is useful for preparing oligonucleotides which are particular DNA duplex. The 2-aminopyridine C-nucleoside or 2-pyridone contacting as monomers to provide access to polymers having unique pendent closeleoside compound is useful for preparing oligonucleotides which are useful in oligonucleotide-based diagnosis and separation through triplex binding, as monomers to provide access to polymers having unique pendent closeleosides, textiles, as comenomers with monomers, for preparing polymers to provide access to polymers having unique pendent closeleosides, textiles, as phase transfer agents, in phase transfer catalysis and liquid/liquid ion extraotion, in the synthesis or spacers or peolytion of their optically active materials, and as linkers or spacers contraining RNA nucleotides, used in a base footprint assay, expense containing RNA nucleotides, used in a base footprint assay.
                                                                                                                                                                                                                                                                                                                                                                                                                           Novel 2-aminopyridine C-nucleoside or 2-pyridone C-nucleoside compound useful for preparing oligonucleotides which are used for detecting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         which demonstrates to use of the oligomers of the invention
                                                                                                                                                                                                                                                                                                                                        Gutierrez AJ, Matteucci MD;
              Location/Qualifiers
11. .15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          specific DNA duplexes in samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 7; Col 24; 18pp; English.
                                                                                                                                                                                                                                                 96US-0023241P.
                                                                                                                                                                                                    97US-00906378
                                                              /*tag= a
                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-196641/19.
                                                                                                                                                                                                                                                                                                                                        Froehler BC,
                                                                                                                                                                                                    05-AUG-1997;
                                                                                                             US6447998-B1
                                                                                                                                                          10-SEP-2002,
                                            misc_RNA
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0; Gaps
                                         0.5%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 9e+02;
tive 0; Mismatches 2; Indels
Sequence 15 BP; 0 A; 5 C; 0 G; 5 T; 5 U; 0 Other;
                                                               Local Similarity 85.7
les 12, Conservative
                                              Query Match
                                                                                        Matches
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1016 AAAAAGAGGGGAG 1029

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HBV enzymatic nucleic acid substrate sequence #63.
                                               ACD56140 standard; RNA; 15 BP
                                                                                    (first entry)
15 AAAAAGAGAGAG 2
                                                                                   23-SEP-2003
                                                                 ACD56140;
                         RESULT 1742
ACD56140
g
                                               ZXEXEXEXEX E
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Nucleic acid molecule, Hepatitis C virus, HCV, Hepatitis B virus, HBV;

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The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HCV) or Hepatitis B virus (HCV) or C and enzymatic nucleic acids such as harmerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decory molecules and apramers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV genes and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds compounds of the invention and/or reusening in the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represente a substrate for one of the HBV enzymatic nucleic acid sequence alsolves in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
RNA stability, RNA expression, RNA synthesis, antisense, enzymeidic acid, hammerhead ribozyme; MNAzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region, viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen J, Morrissey D, Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Page 213; 387pp; English.
                                                                                                                                                                                                                                                                                            26-WAR-2001; 2001US-00817879.
08-UUN-2001; 2001US-00877478.
08-UUN-2001; 2001US-0296876P.
24-0CT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                                                                                                                                          26-MAR-2002; 2002WO-US009187
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Best Local Similarity 42...
Best Local Similarity
6, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                       MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Macejak D,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LEE P.
DRAPER K.
ROBERTS E.
                                                                                                                                               Hepatitis B virus.
                                                                                                                                                                                     WO200281494-A1.
                                                                                                                                                                                                                        17-0CT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Blatt L, N
Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (LEEP/)
(DRAP/)
(ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                       (RIBO-)
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The present invention describes a method for typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis.

The method comprises: (a) providing at least one extension of agene related to cystic fibrosis; (b) providing at least one extension primer; which binds to different predetermined sites in the nucleic acid molecules, where at least one extension primer is designed to extension at least two potential variable sites in the nucleic acid molecule, and nucleotide; (c) simultaneously or sequentially performing primer extension reactions; and (d) determining the pattern of nucleotide conforming the pattern of nucleotide conforming the pattern of set (c) simultaneously or sequentially performing primer extension to obtain a test pattern, optionally (e) comparing the test pattern of set (c) with one or more reference patterns, in order to type the variable sites of the nucleic acid molecules. Also described: (1) pattern of set of the human cystic fibrosis transmembrane conductance response related to the human cystic fibrosis transmembrane conductance comparising at least one extension primer. The method is useful for typing comprising at least one extension primer. The method is useful for typing to response the variable sites of at least one nucleic acid molecule related to cystic fibrosis. The present sequence represents an oligonucleoride which is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis by simultaneously or sequentially performing primer extension reactions and determining the pattern of nucleotide
                                                          typing, variable site, cystic fibrosis; human, cystic fibrosis transmembrane conductance regulator; CFTR;
                     Human CFTR related oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 6; Fig 3; 69pp; English.
                                                                                                                                                                                                                                                               07-MAR-2003; 2003WO-SE000394.
                                                                                                                                                                                                                                                                                                    07-MAR-2002; 2002SE-00000695.
                                                                                                                                                                                                                                                                                                                                          (PYRO-) PYROSEQUENCING
                                                                                                                                                                                                                                                                                                                                                                                   Dunker J;
                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-731684/69.
                                                                                                                                                                                WO2003074737-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             incorporation.
                                                                                                                      Synthetic.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                 Schiller A,
                                                                                                                                                                                                                      12-SEP-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention describes a method of determining presence or absence of a desired nucleic acid (NA) that contains multiple repeats of a desired nucleic acid (NA) that contains multiple repeats of a providing a treated sample that may contain the desired NA in which several predetermined repeating NA target sequences are hybridised with a probe, analysing for presence of hybridised NA containing the NA probe, and thereby the presence of the desired NA. The method is useful for determining the presence or absence of desired nucleic acids that contain multiple repeats of a predetermined NA target sequence, in a NA sample obtained from a biological sample, where the repeated sequence includes several predetermined repeated sequence that distinguishing human and bacterial NA. The method is highly sensitive, and enables detection and quantification of the presence of a NA without the need to undergo a NA target sequence enrichment step prior to a NA hybrid detection step. The method enables rapid and accurate detection of a desired NA that contains multiple repeats of a NA target sequence. This sequence represents a probe used to detect the human Alu repeat sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Determining presence or absence of desired nucleic acids that contain multiple repeats of predetermined nucleic acid target sequences in a sample, by using nucleic acid hybridization methods.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match 0.5%; Score 10.8; DB 1; Length 15; Local Similarity 85.7%; Pred. No. 9e+02; es 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                     Repeated nucleic acid detection method, human probe Alul.
                                                                                                                                                                              Repeated nucleic acid detection; human; alu; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 5 A; 6 C; 1 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shultz JW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 27; 31pp; English.
                   ACA62875 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                 99US-00358972.
                                                                                                                                                                                                                                                                                                                                        5-DEC-2000; 2000US-00739909
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                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mandrekar MN, Tereba A,
                                                                                                                                                                                                                                                                                                                                                                                                                                           (MAND/) MANDREKAR M N.
(TERE/) TEREBA A.
(SHUL/) SHULTZ J W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-479484/45.
                                                                                                                                                                                                                                                             US2003022163-A1.
                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                 21-JUL-1999;
25-AUG-1999;
                                                                                                21-AUG-2003
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                                                          ACA62875;
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ACA62875
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                                                            Gaps
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                                                                                                                                                                                                                                                                                                                      typing; variable site; cystic fibrosis; human;
cystic fibrosis transmembrane conductance regulator; CFTR; ss.
                           Ouery Match 0.5%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 9e+02;
                                                            Indels
                                                            5;
Sequence 15 BP; 2 A; 1 C; 3 G; 9 T; 0 U; 0 Other;
                                                            0; Mismatches
                                                                                                                                                                                                                                                                                             Human CFTR related oligonucleotide.
                                                                                                                                                                                                    ADC66180 standard; DNA; 15 BP.
                                                                                         909 TTTCTTTGGTCTTT 922
                                                                                                                                                                                                                                                              (first entry)
                                                            Matches 12; Conservative
                                                                                                                                                                                                                                                              18-DEC-2003
                                                                                                                                                                                                                                 ADC66180;
                                                                                                                                                                                   ADC66180
ID ADC6
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BP.

ADC66181 standard; DNA; 15

RESULT 1744

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ADC66181

(first entry)

18-DEC-2003

ADC66181;

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07-MAR-2003; 2003WO-SE000394.
                               07-MAR-2002; 2002SE-0000695.
                                      (PYRO-) PYROSEQUENCING AB
                                             Schiller A, Dunker J;
                                                   WPI; 2003-731684/69.
            WO2003074737-A1.
   Synthetic.
Homo sapiens.
                  12-SEP-2003.
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Typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis by simultaneously or sequentially performing primer extension reactions and determining the pattern of nucleotide incorporation.

Example 6; Fig 3; 69pp; English.

The present invention describes a method for typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis. The method comprises: (a) providing at least one nucleic acid molecule of a gene related to cystic fibrosis; (b) providing at least one extension primer, which binds to different predetermined sites in the nucleic acid molecules, where at least one extension primer is designed to extend over at least two potential variable sites in the nucleic acid nucleotide; (c) simultaneously or sequentially performing primer extensions; and (d) determining the pattern of mucleotide incorporation to obtain a test pattern; optionally (e) comparing the pattern of step (c) with one or more reference patterns, in order to type the variable sites of the nucleic acid molecules. Also described: (1) diagnosing the genetic predisposition of states, diseases and drug response related to the human cystic fibrosis transmembrane conductance regulator (CFTR) gene, and (2) a kit for use in the method for typing comprising at least one extension primer. The method is useful for typing at least two variable sites of at least one nucleic acid molecule related to cystic fibrosis. The present sequence represents an oligonucleotide which is used in the exemplification of the present invention.

Seguence 15 BP; 2 A; 1 C; 3 G; 9 T; 0 U; 0 Other;

Gaps 0 0.5%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 9e+02; ative 0; Mismatches 2; Indels Query Match Best Local Similarity 85.7° Matches 12; Conservative

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Search completed: March 1, 2004, 15:22:42 Job time : 43 secs

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